DOCUMENT RESUME

ED 236 243 TM 830 770

TITLE	Summer School Pilot, 1982: First Report to the Texas Education Agency.
INSTITUTION	Austin Independent School District, Tex. Office of Research and Evaluation.
SPONS AGENCY	Texas Education Agency, Austin.
REPORT NO	AISD-ORE-82-F
PUB DATE	Sep 82
NOTE	180p.; Many pages are marginally legible due to small type. For related documents, see TM 820 867 and TM 830 771-772.
PUB TYPE	Reports - Descriptive (141) -- Statistical Data (110)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Basic Skills; Classroom Observation Techniques; Cost Effectiveness; Elementary Education; Grade Repetition; Pilot Projects; *Program Descriptions; *Program Evaluation; *Remedial Programs; School Districts; *Summer Programs; *Summer Schools; Supplementary Education
IDENTIFIERS	*Austin Independent School District TX

ABSTRACT

Students of the Austin (Texas) Independent School District who had been in first through sixth grade and had been retained at some point in their school careers were eligible to attend the 1982 summer school for retainees. A total of 1,193 students were enrolled for at least part of the summer school, with a 94 percent attendance rate for the days enrolled. The program was designed to provide additional basic skills instruction so that retainees would not fall further behind during the summer and would be better prepared to benefit from the following year's instruction. Data are provided for attendance population, program features and implementation, short-term objectives, cost, and measurement of long-term objectives. A summary of this information plus appendices (labeled A-G) detailing the purpose, procedures, and results for each information source are presented. The information sources include: (1) summer school student file, (2) teacher records, (3) employee master file, (4) classroom observations, (5) project records (program description), (6) mastery tests, and (7) cost analysis. (PN)

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ED236243

SUMMER SCHOOL PILOT 1982:
FIRST REPORT TO THE
TEXAS EDUCATION AGENCY

SEPTEMBER, 1982

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TM 830 770

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SUMMER SCHOOL PILOT 1982:
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Office of Planning
and Research
Texas Education Agency

Publication Letter 82-F

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SUMMARY

Project Title: Summer School Pilot Project

Contact Persons: John MacDonald, Nancy Baenen, Freda Holley

Major Positive Findings:

- A total of 1,193 students were enrolled for at least part of the summer school.

- Attendance rates were high. On the average, students were present 94% of the days enrolled.

- The math and Limited English Proficiency (LEP) Reading short-term objectives were met. In math, students were to master specified skills at an 80% level or better. The average percent correct for each grade ranged from 86% to 93% correct. The LEP students showed greater than 80% accuracy on their Spanish workbook assignments and completed three levels of the Stepping Into English series rather than two levels as specified.

Major Findings Requiring Action:

- The short-term objective for the regular reading program was not met. The objective stated that 90% of the students would master all of the required units, but only 60% did. It is the evaluation staff's view that the objective may have been set unrealistically high because the materials had not been used before in the District. The materials and the way in which they were used should also be reviewed.

WHO ATTENDED SUMMER SCHOOL?

Students were eligible to attend the summer school for retainees if they had been in first through sixth grade and had been retained at some point in their school careers. A total of 1,193 students were enrolled and attended at least part of the summer school. Some of the general characteristics of the student body were that:

- About 40% were female and 60% were male.
- Almost half (48%) were Hispanic, while 19% were Black and 23% were Anglo (which matches the percent of the general school population retained fairly closely).
- Almost half of the students enrolled (48%) were retained at the end of the 1981-82 school year. About 13% were retained in 1980-81 and 5% were retained in 1979-80. The retention status of the remaining students (34%) could not be determined because records before 1979-80 were not available.

- Half of the students were in first or second grade.
- Students were an average of six months below grade level in reading in first grade. This difference increased to fifteen months (1.5 years) below grade level in reading by grade six. Students were six to twenty months below grade level in math.
- About 63% were eligible for free- or reduced-price lunch.
- A total of 39 of the 179 students (15% of the total enrolled) classified as Limited English Proficiency (LEP) participated in the program for Spanish monolingual students.
- About one third of the students were eligible for Title I services in 1981-82, with 5% actually served.
- One quarter of those enrolled received special education services in 1981-82.
- The attendance data available for 1981-82 indicated that summer school students were present 94% of the days enrolled. The summer school attendance rate was 94% of the days enrolled.

WHAT WERE THE MAJOR FEATURES OF THE SUMMER SCHOOL PROGRAM?

There is research evidence that low-achieving students fall further behind their higher achieving peers over summer breaks from school. The AISD 1982 elementary summer school for retainees was designed to provide additional basic skills instruction so that retainees would not fall further behind during the summer and would be better prepared to benefit from the following year's instruction.

The summer school curriculum included 90 minutes of reading instruction, 90 minutes of math instruction, and 60 minutes of Community School activities and a snack break. The reading curriculum for English-dominant students was based on the Chicago Mastery Learning Reading system (CMLR) and emphasized comprehension skills at most grades and comprehension and word attack skills at first grade. The CMLR program is organized so that students receive instruction in a particular skill and are tested following instruction. Those students mastering the skill based on this test are given enrichment activities, while those students not mastering the skill are given further instruction. At the end of the additional instruction, these students are again tested to see if they have mastered the skill (based on set criteria).

Students with limited proficiency in English (LEP) received instruction in Spanish reading for three days each week, and in English as a Second Language (ESL) for two days each week, using the following materials: Elena y Dani, Caracolitos, Stepping Into English, I Like English Teaching Cards, Language Visuals, and Scholastic Colección.

The math curriculum was based on the Math for Everyone series, and emphasized problem solving and numeration. Teachers could also cover geometry and measurement as time permitted. Students were tested following instruction in a specific skill, and those showing mastery (having 80% of the items correct or better) were engaged in enrichment activities, while those not showing mastery were given additional instruction and again tested. Students with Limited English Proficiency were instructed in Spanish using the same materials.

Community School activities were of the student's choice, and included arts, crafts, table games, and physical education.

Special features of this year's summer school included telephone calls to one-half of the students' 1981-82 teachers and home visits to one-fourth of the students' parents. These contacts were designed to increase the information available to the teacher in planning for the students' instructional needs. Parents were also sent information on follow-up activities they could complete with their children between the end of summer school and the beginning of regular school. It was hoped that these activities would increase parent involvement and promote continued student learning for the rest of the summer.

Summer school was held on five campuses: Becker, Brooke, Cook, Maplewood, and St. Elmo schools from June 7 through July 9 (a total of 24 instructional days). Instructional staff were selected on the basis of recommendations from instructional coordinators and principals, and ratings by personnel on selected criteria (e.g., their length of experience at their grade level).

A total of 77 teachers participated, of which 94% were female. In terms of ethnicity, 23% were Hispanic, 10% were Black, and 66% were Anglo. Half of these teachers had six or more years' experience in education. About 40% held master's degrees, while the other 60% held bachelor's degrees. All teachers held certification for the elementary level; 21% were certified to teach bilingual classes, and 27% were certified to teach special education classes.

Setting up and maintaining the operation of the summer school was the overall responsibility of the Directors of Elementary Management and Curriculum. The language arts, language response program, and math curriculum committees were responsible for selecting curriculum, setting up procedures for its use, and ordering and delivering materials. An educational planner was the primary writer of the grant application to TEA, and also helped with the home visit and telephone call procedures and follow-up activities. An evaluator helped to develop the TEA grant application, and with some aspects of the home visit and telephone call planning. The evaluator and an evaluation intern developed and carried out the evaluation of the project. Staff members in personnel, transportation, school plant, and finance also had responsibilities for certain aspects of the program.

WAS THE SUMMER SCHOOL IMPLEMENTED AS PLANNED?

Information about program implementation was obtained by examining project records, teacher records, classroom observation, a teacher survey, a director survey, and a parent survey.

In the program as it was originally planned, 900 students were expected to enroll, and 60 teachers were to be hired for a planned pupil-to-teacher ratio (PTR) of 15 to 1. As enrollment went past 900 to a final total of 1,193, the number of campuses increased from three to five, and 77 teachers were hired instead of 60. The final PTR was 15.5 students to each teacher, very close to the planned value. The actual number of students present in the classroom on any one day averaged 12 students per teacher, based on 206 hours of observation in 25 classrooms.

Three hours were allotted to basic skills instruction in the program as originally planned. The full-day observations revealed that 64% of this allotted time was spent actively engaged in basic skills instruction, while 36% was spent in management and other noninstructional tasks. Students appeared to be "on-task" for 89% of the time they were actually engaged in basic skills instruction. These time estimates are close to those obtained in previous observations of Title I classrooms.

Because the math and reading programs both involved frequent assessments of student progress and because summer school teachers did not know their students before the first day, it was expected that one noninstructional activity reducing engaged time would be assessment. Observers reported that 5% of basic skills time was spent in assessment; 6% during the first week of summer school.

Students spent 63% of engaged instructional time working with the teacher, and 37% working on their own. When not working on their own, students worked in groups with an average size of 12; this essentially meant the entire class. Teachers had been given examples of small group activities that students might be engaged in during enrichment, but the occurrence of small group instruction seems to have been infrequent.

Observers reported no departures from the planned sequence of instruction in math or reading except that "motivational exercises" took place less frequently than every day.

One aspect of the program was the use of rewards for attendance for good behavior and for good academic performance. Calculators, given to students for use during math class, could be kept by students if they were absent fewer than three days. Scented stickers and other rewards were given to students for good behavior and performance. About 69% of the students earned calculators for being present at least 22 of the 24 days. Students were given an average of 2.8 scented stickers per day based on observations; in 91% of the cases, these rewards seemed obviously tied to good behavior or good academic performance.

Teachers were asked to visit only a sample of student homes and call only some former teachers to decrease the time necessary for the activity and to enable them to compare effectiveness of the methods in providing instructional information. When surveyed, 32% of the teachers stated that the telephone calls to teachers were more useful, while 27% felt home visits were more useful, and 41% weren't sure which was more useful. Thus, both were seen as helpful by at least some teachers, but no clear-cut preference was found.

WERE THE SHORT-TERM OBJECTIVES FOR THE PROGRAM MET?

The reading program generally did not meet its short-term objective that "by the end of the five-week summer school, reading skills specified for each grade level will be mastered by 90% of the retainees participating." This objective was obtained for all objectives at grade six, for four of the required objectives at grade four (categorizing, comparisons unit I, cause and effect, and fact and opinion). The short-term objective was not attained for any of the first-, second-, third-, or fifth-grade skills.

This failure may have been a consequence of setting the criterion at 90%. The objective would have been more realistic if it had stated that 70% of the students would master the required units at an 80% mastery level. All skills at first grade, two of five skills at second grade, four of five skills at third grade, all fourth grade skills, five of six skills at fifth grade, and all sixth grade skills were mastered by at least 70% of the students. A total of 30 of the 37 required units were mastered by 70% or more of the students.

The LEP Spanish Reading program met its short-term objective that "LEP retainees participating in summer school will show 80% accuracy on workbook assignments on the average." All students met this criterion. Based on data for 26 of the 39 LEP students (67%), it appears that the LEP English as a Second Language program met its short-term objective that "LEP retainees participating in summer school will complete at least two levels in the Stepping Into English series." All 26 students were reported to have completed three levels: The City Mouse and Country Mouse, The Lion and the Mouse, and The Rabbit and the Turtle.

The short-term objective for the math program, that "by the end of the five-week summer school, participating retainees will, on the average, master the number of skills specified for their instructional level at an 80% level," appears to have been met. For each grade, the mean percent correct on math mastery tests ranged from 86% correct to 93% correct.

HOW MUCH DID SUMMER SCHOOL COST?

Preliminary budget figures indicate that $263,726 was spent for this year's summer school from local and TEA funds allocated for this purpose. This does not reflect the salaries of the five directors while still on their 1981-82 contracts and over 1,300 hours of planning and implementation time put in by other District administrators.

HOW WILL ACHIEVEMENT OF LONG-TERM OBJECTIVES BE MEASURED?

A control group of retainees who did not attend summer school will be matched with a group of retainees who did attend summer school. These students will be matched on: ethnicity, sex, grade, Title I eligibility, LEP status, special education service, reading achievement (April 1982, Iowa Tests of Basic Skills (ITBS) Reading Total) and math achievement (April 1982 ITBS Math Total). These two groups of students will be compared on April 1983 ITBS reading achievement (both on Reading Total and on skills emphasized in summer school) and on ITBS Math achievement (both Math Total and on skills emphasized in summer school). These sources will be used to asses the attainment of the following long-term objectives.

> Reading: As of April 1983, retainees participating in the 1982 summer school will show higher achievement in reading areas emphasized than will retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).
>
> Math: As of April 1983, retainees participating in the 1982 summer school will show higher achievement in math areas emphasized than will retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).

A teacher checklist of math and reading skills will be sent to a sample of teachers who have retainees who did and did not attend summer school to see if those attending summer school are showing noticeably better performance this fall.

Summer School Pilot Project

Appendix A

SUMMER SCHOOL STUDENT FILE

Instrument Description: Summer School Student File

Brief description of the data file:

The Summer School Student File is a collection of information from a variety of sources. It contains demographic data about students in the 1982 elementary Summer School Pilot Project (SSPP), as well as academic and enrollment data about these students. It also contains data about characteristics of the summer school program they received, and academic and attendance data for summer school.

Which students or other individuals are included on the file?

All students attending the 1982 AISD elementary Summer School Pilot Program.

How often is information on the file added, deleted, or updated?

Never. The file was created only for the purpose of evaluating the 1982 summer school.

Who is responsible for changing or adding information to the file?

N/A.

How was the information contained on the file gathered?

Student identification numbers, 1981-82 attendance, and AISD enrollment information were obtained from cards filled in by the 1981-82 teacher of summer school students. Some ID numbers which were missing were looked up individually based on the Student Master File. Student eligibility for and 1981-82 service by Title I, Title I Migrant, SCE, LEP, and Special Education programs was obtained from ORE Project Files.

Are there problems with the information on the file that may affect the validity of the data?

Attendance data for 1981-82 were copied by 1981-82 teachers from their records to summer school registration cards. ORE observers collected this information and transferred it to forms suitable for keypunching. This three-step process may have resulted in some errors. Other sources of error are unknown.

What data are available concerning the accuracy and reliability of the information on the file?

Attendance data could be checked against attendance registers but time costs are prohibitive. A check of identification numbers and program participation could be done with some project files.

Are there normative or historical data available for interpreting the results?

No.

Brief description of the file layout:

See Attachment A-1.

SUMMER SCHOOL STUDENT FILE

Purpose

The Summer School Student File was created to provide information used to answer the following decision and evaluation questions:

Decision Question D1: Were the students served and staffing of summer school appropriate for future summer schools? Are alterations necessary ?

Evaluation Question D1-1: What were the characteristics of students served by summer school including:

- Age
- Sex
- Grade Level
- Ethnicity
- Eligibility for Title I, Title I Migrant, LEP and SCE programs in 1981-82
- Service by Title I, Title I Migrant, LEP, and SCE programs in 1981-82
- Free lunch eligibility
- Number of years enrolled in AISD
- Attendance rate for 1981-82
- Special Education status
- Year of retention: this year or earlier
- Historical achievement data: mean scores in grade equivalents on ITBS reading and math, spring 1982.

The file will be updated with spring 1983 ITBS reading and math scores to answer the following decision and evaluation questions:

Decision Question D4: Should retainees be encouraged to attend summer school?

Evaluation Question D4-2: Did students meet long-term objectives?

Evaluation Question D4-3: What were the average grade equivalent scores of retainees in the summer school in April 1982 and April 1983? By skill areas emphasized and not emphasized in summer school?

Evaluation Question D4-4: How did the scores of retainees who attended summer school compare to those of retainees who did not attend summer school as of April 1983? By skill areas emphasized and not emphasized in summer school?

Evaluation Question D4-5: Can any variables be identified that relate to student achievement?

Data pertinent to Decision Question D1 is reported in this technical report. The ITBS will not be administered until April 1983 and thus data pertinent to Decision Question D4 will not be available until that time. The results of the 1983 ITBS testing will be reported in the 1982-83 technical report on retainees, to be released in July of 1983.

Procedure

The Summer School Student File has been created from several data sources:

1. Summer School Teacher Records
2. Summer School Registration Cards
3. The July 1982 Student Master File
4. The July 1982 Family File
5. The Spring 1982 ITBS File
6. The Title I Master Service File
7. The Migrant Master File
8. The SCE "ELE" File
9. The LANG File (LEP Status)
10. The Special Education Master File

These files were accessed to gain information pertinent to Decision Question D1. Data obtained from sources 3-10 listed above were obtained in a similar manner and will be described together below.

Summer School Registration Cards: At the time summer school classes began, the names of students enrolled were known only to campus directors and summer school teachers. In order to access information about the students attending summer school, we first had to find out who those students were. The information teachers and directors had on each student was contained on the summer school registration cards, which had been completed by each student's former teacher. A facsimile of this card is contained in Attachment A-2. The card contained the student's name, age, 1981-82 school, the student's ID number, parents' address and phone numbers, information about the reading and math texts the student used in 1981-82, special program enrollment, days enrolled in 1981-82, days absent 1981-82, and years enrolled in AISD.

Observers hired by ORE to make instructional-process observations were also asked to collect this information. For each summer school first-period class, these observers copied student's name, ID number, number of days enrolled in 1981-82, number of days absent in 1981-82, and years in attendance in AISD, as well as information about whether a student was chosen by the teacher to have a home visit made to his parents' home or whether a student was chosen to receive a phone call by the summer school teacher to the student's 1981-82 teacher, and whether or not these home visits and phone calls were successfully completed. The record form used by the observers for collecting this information is contained in Attachment A-3. The procedure used by teachers to choose which child would receive a phone call or a home visit is contained in Appendix E (Project Records). The information contained on these record forms was keypunched and entered on the file.

Summer School Teacher Records: Each teacher maintained a record of student absences during the summer school. This record was given to the campus director the last day of the summer school (July 9th). On July 12th, the campus directors sent these records to ORE via school mail. Coders hired by ORE collected this data on attendance on the record form contained in Attachment A-4 and the data was keypunched and matched to the file which had been created with data from the registration cards. Other data collected on the record form in Attachment A-4 were used to collect mastery test information, and these data are described in Appendix F (Mastery Tests).

ORE Project Files: Student IDs on the Summer School Student File were matched against IDs appearing on the July, 1982 Student Master File to obtain students' ethnicity, date of birth, sex, and 1981-82 grade. These student IDs were also matched against the July Family File to obtain students' addresses. Addresses were necessary to create mailing labels for the follow-up activities described in Appendix E (Project Records). Student IDs appearing on the Summer School Student File were matched against the spring 1982 ITBS File to obtain these students' test scores. Finally, student IDs appearing on the Summer School Student File were matched against the Title I Master Service File, the Migrant Master File, the SCE "ELE" File, the LANG File (LEP), and the Special Education Master File to obtain data regarding students' eligibility for and service by each of these programs.

Results

Summary statistics were generated for each of the variables and are reported below. The total number of students served was 1,193. This is based on the number who showed up for at least part of the summer school term and is not an average daily enrollment figure. Some descriptive data was not available for some students.

		Number	%
Sex	Female	417	39.1
	Male	656	60.9
	TOTAL	1,078	100.0

Figure A-1. SEX OF SUMMER SCHOOL STUDENTS. Although 1,193 students attended Summer School, demographic information was only available for 1,078.

Age (Years-Months)	Mean	9-8
	Median	9-5
	Range:	5-11 to 14-11

Figure A-2. AGE OF SUMMER SCHOOL STUDENTS. N=1,078.

Grade Level:	Summer School		N	%
		First	313	27.8
		Second	257	22.8
		Third	146	13.0
		Fourth	183	16.2
		Fifth/Sixth	224	19.9
		Total	1127	100.0

Figure A-3. SUMMER SCHOOL GRADE PLACEMENT OF STUDENTS.

Special Programs

	Eligible		Served	
	Numbered	Percent	Number	Percent
Title I	372	32.6%	61	5.3%
Title I Migrant	61	5.3%	28	2.5%

Figure A-4. STUDENTS ELIGIBLE AND SERVED BY TITLE I AND TITLE I MIGRANT PROGRAMS IN 1981-82. N=1,141.

	Number	Percent
SCE Reading	91	8.0%
SCE Math	35	3.1%
Special Education	285	25.0%

Figure A-5. STUDENTS SERVED BY STATE COMPENSATORY EDUCATION (SCE) AND SPECIAL EDUCATION IN 1981-82. N=1,141.

The mean number of minutes served per day for Special Education students was 118.7; the median was 114.5. The range of minutes served per day was 8.0 to 360.0 per day.

ETHNICITY	SUMMER SCHOOL GRADE PLACEMENT												TOTAL	
	K		1		2		3		4		5/6			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
AMERICAN INDIAN	0	0	1	25.0	2	50.0	0	0	0	0	1	25.0	4	0.4
ASIAN	0	0	3	50.0	0	0	2	33.3	1	16.7	0	0	6	0.6
BLACK	0	0	84	27.4	72	23.5	45	14.7	57	18.6	49	16.0	307	28.5
HISPANIC	13	2.5	153	29.8	112	21.8	52	10.1	79	15.4	105	20.4	514	47.7
ANGLO	0	0	61	24.7	55	22.3	37	15.0	40	16.2	54	21.9	247	22.9
TOTAL	13	1.2	302	28.0	241	22.4	136	15.0	177	16.4	209	19.4	1,078	100.0

Figure A-6. ETHNICITY BY GRADE PLACEMENT. Cell percentages indicate percent of ethnic group. Row total percentages indicate percent of total (1,078).

ETHNICITY	CAMPUS										TOTAL	
	BECKER		BROOKE		COOK		MAPLEWOOD		ST. ELMO			
	#	%	#	%	#	%	#	%	#	%	#	%
AMER. INDIAN	1	0.5	0	0	3	1.4	0	0	0	0	4	0.4
ASIAN	3	1.6	0	0	2	0.9	0	0	1	0.5	6	0.6
BLACK	23	12.6	33	13.7	82	38.0	140	63.6	29	13.2	307	28.5
HISPANIC	94	51.6	202	84.2	60	27.8	56	25.5	102	46.4	514	47.7
ANGLO	61	33.5	5	2.1	69	31.9	24	10.9	88	40.0	247	22.9
TOTAL	182	100.0	240	100.0	216	100.0	220	100.0	220	100.0	1,078	100.0

Figure A-7. ETHNICITY BY CAMPUS ENROLLED. Brooke is the campus where LEP/ESL classes were held. Cell percentages indicate percent of campus enrollment.

	MEDIAN	N
Number of Years Enrolled AISD	3.23	603
Number of Days Enrolled, 1981-82	174.3	644
Number of Days Absent, 1981-82	6.7	581
Percent Days Attending, 1981-82	96.2	581

Figure A-8. ATTENDANCE AND ENROLLMENT DATA FOR 1981-82 FOR THE 1982 SUMMER SCHOOL STUDENTS. (Attendance and enrollment data was only listed on the cards of 603 (50.5%) of the 1,193 students enrolled in Summer School.)

	MEDIAN	N
Number of Days Enrolled	23.9	1000
Number of Days Absent	0.7	1000
Percent of Days Attending	97.1	1000

Figure A-9. ATTENDANCE AND ENROLLMENT DATA FOR SUMMER SCHOOL FOR 1982 SUMMER SCHOOL STUDENTS. (Data was only collected for 1,000 (83.8%) of the 1,193 students enrolled in Summer School.)

YEAR OF RETENTION	N	%
1981-82	551	48.3
1980-81	151	13.2
1979-80	63	5.5
Earlier than 1979-80	256	22.4
Probably not Retainees	134	11.7
TOTAL	1,141*	100.0*

Figure A-10. NUMBER OF RETAINEES VERSUS NONRETAINEES IN SUMMER SCHOOL. Record of student retentions are available on central records only for 1981-82, 1980-81, and 1979-80. Students who were not listed on these files were assumed to have been retained earlier than 1979-80 if their present grade placement is Grade 3-Grade 6, or not retained if their present grade placement is K-Grade 2.

*Some students were retained more than once, so N and Percent Totals are not sums of row entries.

	READING TOTAL			MATH TOTAL		
	MEAN	SD	N	MEAN	SD	N
K	0.60	0.57	2	1.13	0.31	6
1	1.19	0.48	242	1.34	0.52	252
2	1.80	0.63	198	2.24	0.62	197
3	2.65	0.73	109	2.97	0.61	116
4	3.30	0.91	136	3.53	0.72	139
5	4.27	1.16	167	4.47	0.96	176
6	4.93	0.42	3	5.33	0.61	3

Figure A-11. SPRING 1982 IOWA TESTS OF BASIC SKILLS (ITBS) SUBTEST SCORES IN GRADE EQUIVALENTS FOR SUMMER SCHOOL STUDENTS. "SD" means standard deviation.

	N	%
LEP	183	15.3
NON-LEP OR UNDETERMINED	1010	84.7
TOTAL	1193	100.0

Figure A-12. NUMBER AND PERCENT OF SUMMER SCHOOL STUDENTS WHO ARE LIMITED IN ENGLISH PROFICIENCY (LEP) AS OF SEPTEMBER 1982.

	N	%
ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH	749	62.8
RECEIVING FREE OR REDUCED-PRICE LUNCH	718	60.2
NOT ELIGIBLE	444	37.2
TOTAL	1193	100.0

Figure A-13. NUMBER AND PERCENT OF SUMMER SCHOOL STUDENTS WHO ARE ON FREE OR REDUCED-PRICE LUNCH.

Summary:

Atotal of 1,193 students were served by the summer school. Almost two-thirds (61%) were male, which matches the percentage of retainees who are male in AISD very closely. Ethnic percentages are also representative of AISD's retainee population, with 47.7% Hispanic, 28.5% Black, 22.9% Anglo, and 1% American Indian or Asian students. The greatest percentage of students served were in first (27.8%) or second (22.8%) grade. Of those students recommended for retention in 1981-82, 39.2% were first graders and 16.8% were second graders.

About 63% of the students were low-income based on free- or reduced-price lunch eligibility. About one-third were eligible for Title I services (33%) and about one-sixth (15%) had limited English proficiency. About 25% of the students were eligible for Special Education. Interestingly, one-quarter of the summer school teachers were certified to teach these students. Students were generally six months (in first grade) to two years (in fifth grade) behind their grade placement in reading achievement in April 1982, and were between six months (first grade) and one and a half years (fifth grade) behind in math.

Information regarding matched-control group students:

A sample of summer school students who were retained in 1981-82 (N=551) and a sample of those retained in 1980-81 (N=151) will be matched on year of retention, ethnicity, sex, grade, Title I eligibility, LEP status, special education service, reading achievement (April 1982 ITBS Reading Total), and math achievement (April 1982 ITBS Math Total) with a sample of 1981-82 retainees (N-892) and 1980-81 retainees (N=1074) who did not attend the 1982 summer school program. These two groups of students will be compared on April 1983 ITBS reading and math achievement, and on a Fall 1982 teacher checklist of reading and math performance.

Attachment A-1
Page 1 of 2

FILE LAYOUT

☐ LABELED ☐ UNLABELED

PAGE ____ OF ____

LABEL ID __________ TAPE NO. __________ BY: __________

BLOCKSIZE __________ CHARACTERS __________ DATE CREATED: __________

RECORD SIZE __________ CHARACTERS __________ SUG. SCRATCH DATE: __________

__________ DENSITY __________ BPI

SEQUENCE __________

DESCRIPTION Summer School 1982

REMARKS Student characteristics / Program Characteristics

NO. OF COLS.	COLUMNS FROM	TO	DATA FORMAT	FIELD NAME	REMARKS
3	1	3	Numeric	School #	(104, 109, 122, 136, 161)
1		4	AlphaNumeric	Grade (SS grade)	(0-6, blank)
2	5	6	Numeric	Teacher #	1-77
16	7	22	ALPHA	Last Name	
12	23	34	"	First Name	
1		35	"	Middle Initial	
7	36	42	Numeric	Student #	
1		43	ALPHANumeric	Split Code	(don't use)
1		44	"	"To receive phone call"	(1, 0 or blank)
1		45	"	"To receive home visit"	"
1		46	"	"Received phone call"	"
1		47	"	"Received home visit"	"
3	48	50	"	Days Absent 1981-82	(0 - 175, or ▲)
3	51	53	"	Days Enrolled 1981-82	"
1		54	"	Years Enrolled AISD	(0 - 6, or ▲
33	55	87	"	Address	
5	88	92	"	Zip Code	
6	93	98	Numeric	Date of birth	mm/dd/yy/
1		99	Alpha	Sex	1= male, 3= female
2	100	101	"	Grade	K▲, 01→06, S▲, ▲▲
1		102	"	Ethnicity	1→5, or ▲
1		103	ALPHA	Vocabulary	ITBS 4-82
1		104	"	Comprehension	
1		105	"	Concepts	
1		106	"	Problems	Special Circumstances
1		107	"	Computations	▲ = valid
1		108	"	Reading Total	X = missing subtest
1		109	"	Math Total	* = special circumstances
4	110	113	Numeric	Vocabulary G.E.	
4	114	117	"	Comprehension G.E.	

FILE LAYOUT

LABEL ID ________ TAPE NO. ________ BY: ________

BLOCKSIZE ________ CHARACTERS ________ DATE CREATED ________

RECORD SIZE ________ CHARACTERS ________ DENSITY ________ BPI

SEQUENCE ________

DESCRIPTION ________

REMARKS ________

NO. of COLS.	COLUMNS FROM	COLUMNS TO	DATA FORMAT	FIELD NAME	REMARKS
4	118	121	Numeric	Concepts G.E.	ITBS 4-82 :
4	122	125	"	Problems G.E.	
4	126	129	"	Computations G.E.	
4	130	133	"	Reading Total G.E.	
4	134	137	"	Math Total G.E.	
1	138	138		Title I eligibility	(1=eligible, 0=not eligible)
1	139	139		Title I combined service	(0=not served, 1=lab, lab;
					2=class, class; 3=both, both; 4=served differently; 5=served
					only fall or only spring
1	140	140		Title I Migrant-migrant	status (1, 2, 4, 5=currently
					eligible; 3, 6=former elibible)
1	141	141		Title I Migrant-service	status (1=service, 0=not served)
1	142	142		SCE-"ELE" file - service	in reading/LA (1=service,
					0=otherwise)
1	143	143		SCE-"ELE" file-service	in math (1=service, 0=otherwise)

82-F

STUDENT DATA CARD for SUMMER SCHOOL 1982

Student's Name______________________ Age_____ School____________________ Grade ☐

Student's ID Number__________________ Address____

Phone: Home____________________ Work____________ ____________

INSTRUCTIONAL INFORMATION

Special Programs____________________

READING

Basal completed
Title____________________
Publisher________________

Recommended Instructional Level____________

ITBS 1981 scores
Vocabulary________________
Comprehension____________

HEALTH ALERT

Comments:

MATH

Text completed
Title____________________
Publisher________________

Recommended Instructional Level____________

ITBS 1981 scores
Computation________________
Concepts__________________
Problem solving____________

ATTENDANCE Days Enrolled__________ Days Absent_______

Years Enrolled in AISD
(to closest year)________________

Bilingual Program Only

____A ____B ____C ____D ____E

Spanish Reading

Basal Title
Level

A-13

Attachment A-2

Attachment A-3

SCHOOL ____________________ GRADE __________ TEACHER ____________________

STUDENT NAME	ID NUMBER	To Receive Phone Call	To Receive Home Visit	Received Phone Call	Received Home Visit	1981-82 Days Present	Days Enrolled
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
No. in class ____		No. chosen to call ___	No. chosen HV ____	No. Reached ___ (___%)	No. Reached ____ (___%)		

Student's Name	ID #	Reading Teacher, #	Math Teacher, #	Days enrolled	Days absent	Grade	Reading Skills 1	2	3	4	5	6	7	8	9	10	11	Math %

Attachment A-4

SUMMER SCHOOL 1982 -- STUDENT CHARACTERISTICS

FREQUENCY DISTRIBUTION FOR VARIABLE #22 (% ABSENT OF ENROLLED)

CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT.)	ADJUSTED FREQ (PCT.)	CUMULATIVE FREQ (PCT.)
1.00	100.	8.8	17.2	17.2
2.00	86.	7.5	14.8	32.0
3.00	70.	6.1	12.0	44.1
4.00	34.	3.0	5.9	49.9
5.00	53.	4.6	9.1	59.0
6.00	39.	3.4	6.7	65.7
7.00	30.	2.6	5.2	70.9
8.00	26.	2.3	4.5	75.4
9.00	28.	2.5	4.8	80.2
10.00	19.	1.7	3.3	83.5
11.00	10.	0.9	1.7	85.2
12.00	12.	1.1	2.1	87.3
13.00	10.	0.9	1.7	89.0
14.00	20.	1.8	3.4	92.4
15.00	7.	0.6	1.2	93.6
16.00	6.	0.5	1.0	94.7
17.00	6.	0.5	1.0	95.7
18.00	6.	0.5	1.0	96.7
19.00	2.	0.2	0.3	97.1
20.00	3.	0.3	0.5	97.6
21.00	2.	0.2	0.3	97.9
22.00	1.	0.1	0.2	98.1
23.00	1.	0.1	0.2	98.3
24.00	1.	0.1	0.2	98.5
25.00	1.	0.1	0.2	98.6
26.00	1.	0.1	0.2	98.9
29.00	3.	0.3	0.5	99.1

```
   38.00        1.        0.1       0.2      99.5

   39.00        2.        0.2       0.3      99.8

   57.00        1.        0.1       0.2     100.0

    0.0       560.       49.1   MISSING     100.0

   TOTAL     1141.      100.0     100.0

 VALID CASES=   581
 MISSING CASES=  560

 MEAN=     6.1490         VARIANCE=    36.1677
 STD. DEV=    6.0140      STD. ERR=     0.2495
 MAXIMUM=   57.0000       MINIMUM=     1.0000
 RANGE=   57.0000
```

Summer School Pilot Project

Appendix B

TEACHER RECORDS

Brief description of the data file:

Teacher Records refers to several miscellaneous data sets collected by teachers. This information included summer school daily attendance for each student, 1981-82 daily school attendance and years enrolled in AISD for each student, the number of home visits attempted and successfully made to students' homes, the number of phone calls to students' former teachers attempted and successfully made, and the specific reading and math objectives which each teacher was able to teach.

Which students or other individuals are included on the file?

Students in the 1982 Summer School Pilot Project (SSPP) are included in the file.

How often is information on the file added, deleted, or updated?

The File will not be added to after all information regarding the 1982 SSPP is collected. Its use after the 1982 SSPP evaluation is complete will be somewhat limited.

Who is responsible for changing or adding information to the file?

The evaluator and evaluation intern responsible for the evaluation of the SSPP (Nancy Baenen and John MacDonald).

How was the information contained on the file gathered?

Teachers kept daily attendance records on a standard form (see Attachment B-1), and kept track of home visits and phone calls on each student's registration card (see Attachment B-2). Teachers recorded objectives successfully completed on student mastery test records, described in Appendix H. ORE coders reviewed all of these data sources and recorded the information on forms suitable for keypunching (see Attachment B-3).

Are there problems with the information on the file that may affect the validity of the data?

No known problems. The 1981-82 attendance data for some students were missing.

What data are available concerning the accuracy and reliability of the information on the file?

It is possible to check the accuracy of summer school attendance data by comparing attendance records with mastery test records. When a student was absent for instruction directed at a particular objective, that student was recorded as absent on the mastery test record as well as the attendance record. This check was not performed however, because of the time and effort involved and the expectation that attendance data would be generally accurate. No validity checks were possible on the other sets of data. Reliability was checked by reviewing a sample of records reviewed by the coders

Are there normative or historical data available for interpreting the results?

No. Summer school attendance may be compared to attendance during the 1981-82 school year, but this will not aid interpretation of the 1982 summer school attendance data.

Brief description of the file layout:

See Attachment B-4 for the file layout.

TEACHER RECORDS

Purpose

Teacher Records refers to a set of miscellaneous data sources which have been combined in one file. The file was created to provide information regarding the following decision and evaluation questions:

Decision Question D1: Were the students served and staffing of summer school appropriate for future summer schools? Are alterations necessary?

Evaluation Question D1-1: What were the characteristics of students served by summer school including:

- Number of years enrolled in AISD.
- Attendance rate for 1981-82.
- Attendance in summer school.

Decision Question D2: Was the structure of summer school appropriate for future summer schools? Are alterations necessary?

Evaluation Question D2-9: How much material were the teachers able to cover in math and reading? How long did reading units take to teach?

Decision Question D3: Should additional information be provided to teachers about the students before the start of future summer school programs?

Evaluation Question D3-1: Did teachers receive information on retainees from the previous teacher? When?

Evaluation Question D3-2: Were summer school teachers able to reach regular school teachers of assigned retainees?

Evaluation Question D3-3: Were teachers able to visit the homes of assigned retainees?

Decision Question D4: Should retainees be encouraged to attend summer school ?

Evaluation Question D4-5: Can any variables be identified that relate to student achievement?

Procedure

Teachers received instructions in procedures for recording needed data during the local in-service workshops held on their summer school campuses on June 1 and June 2. ORE staff provided instructions to teachers regarding keeping records of home visits made to students' families and of phone calls to students' former teachers. Instructions regarding attendance procedures were given to teachers at this time by the campus directors.

Teachers were asked during the workshop to record which students were to receive a phone call to their former teacher and which students were to receive a home visit on the student's registration cards. The procedures used by teachers to choose students who were to receive phone calls and home visits are described in Appendix E (Project Records). Teachers put a checkmark and a "PC" next to students' names who were to receive phone calls and a checkmark and an "HV" next to students' names who were to receive home visits. When a phone call was successfully made to a student's former teacher, or a home visit was successfully made to the student's parents, a slash was made through the check next to that student's name. At the in-service, directors discussed keeping attendance records and teachers were given attendance record forms (see Attachment B-1). Teachers received instructions in recording student mastery of objectives at in-service sessions held May 15 and May 31 and in their instructional manuals. This is described in Appendix F (Mastery Tests).

During the period of time that summer school was in session, ORE observers made observations in three classrooms a day to obtain data regarding the instructional process, data which is reported in Appendix D. The schedule of summer school was arranged so that an hour of recreational and Community School activities occurred between instruction in reading and math. This freed time for the observers to collect data from teacher records. Observers obtained from the summer school registration cards each student's name, identification number, the teacher's name, whether or not that student was selected to have a phone call made to his or her former teacher, whether the call was successfully made, whether or not the student was selected to have a home visit made, whether or not the home visit was successfully made, the number of days the student was enrolled in AISD in 1981-82, the number of days the student was absent in 1981-82, and the number of years the student was enrolled in AISD. Observers recorded this information on the form contained in Attachment B-3. These forms were kept in the director's office on each campus and returned to ORE by the observers when data had been collected from all classes.

On the last day of summer school, July 9th, teachers gave the attendance records for their classes to their directors, as well as the mastery test record forms and the registration forms for summer school. All of these records were sent by the directors to ORE through school mail.

The information on the observer record forms (Attachment B-3) needed to be keypunched quickly so that mailing labels for follow-up could be made. The other data from teacher records (summer school attendance data and mastery test data) needed to be collected and keypunched also but became available after the labels were needed. Thus, this data was entered in the file by a two-step process. When attendance records and mastery tests became available, ORE coders entered student name, math teacher name, reading teacher name, days enrolled in summer school, days absent during summer school, grade in which the student was enrolled in summer school, reading objectives mastered, and the average percent accuracy scored on tests of math objectives. This information was recorded on the form in Attachment B-4, and then keypunched. The layout of the file is indicated in Attachment B-5. Summary statistics were generated for these variables and are reported below.

Results

Results are discussed below by evaluation question.

Evaluation Question D1-1: What were the characteristics of students served by summer school, including:

- number of years enrolled in AISD.
- attendance rate for 1981-82.
- attendance in summer school.

Data regarding number of years enrolled in AISD was available for 603 students (52.8%). These students were enrolled in AISD schools an average of 3.4 years. Students who were enrolled in AISD for one year or less accounted for 13% of these students. There were 16 students (2.7%) who had been enrolled for seven years.

Attendance data for 1981-82 was available for 644 students (56.4%). Most of these 644 students (462 or 71.7%) were enrolled for the full 175 days. The average days enrolled was 161.9. The median number of days enrolled, however, was 174.3. This means that half of the students were enrolled for more than 174 days. The median number of days absent was 6.7. This means that half of the students had attendance rates above 96%, during 1981-82, and half had attendance rates which were below 96%. Less than ten percent of the students had attendance rates lower than 87%. The mean attendance rate was 94%. This is the value that should be used in comparison with the general school population.

Summer school enrollment data are available for 1,058 students. A total of 812 of these students (76.7%) attended all 24 days. The median number of days enrolled was 23.8 days. Ninety percent of the students were enrolled for at least 18 days. The median number of days absent was 0.7 days, for an attendance rate of 97.1%. Forty-five percent of the students were never absent, and less than ten percent were absent for more than three days.

The average attendance rate based on mean days present and enrolled was 94%.

Two cautions must be kept in mind in interpreting these figures. The method of calculating attendance does not strictly match that used by Pupil Accounting. Also, attendance records are only as accurate as teacher records, and we cannot be sure that all teachers used the same method to decide when to "drop" (cross out) a student for nonattendance.

Evaluation Question D2-9: How much material were the teachers able to cover in math and reading? How long did reading units take to teach?

Figures B-1 through B-6 report the number of reading objectives teachers were able to cover and indicate the number of days it took teachers to teach each reading objective. Figure B-7 indicates the number of math objectives covered by math teachers in each grade.

Evaluation Question D3-1: Did teachers receive information on retainees from the previous teacher? When?

Teachers were to receive information from the previous teacher several ways: 1) reports of the students' skill strengths and weaknesses completed near the end of the year, 2) registration cards for each student filled out by each student's previous teacher near the end of the year, and 3) summer school teachers' phone calls to students' former teachers.

Teacher reports of skill strengths and weaknesses were never forwarded to summer school teachers. The original of this report was to be kept in the student's permanent folder, with copies to be sent to summer schools. The copies were never made, however.

Registration cards, indicating the students' name, age, 1981-82 school, 1981-82 grade, ID number, address, phone number, reading basals completed, recommended reading and math instructional levels, 1982 ITBS Vocabulary, Comprehension, Computation, Math Concepts, and Math Problem Solving subtests, days enrolled 1981-82, days absent 1981-82, and years enrolled in AISD. For Limited English Profieicney (LEP) students, the cards also included the students' classification (A or B), and the student's Basal Spanish reader.

Figure B-8 indicates the number of registration cards received by each of the five campuses and the number of students who enrolled. Each campus received cards for some students who never arrived, and never received cards for some other students.

	Summer School Campuses					
	Becker	Brooke	Maplewood	St. Elmo	Cook	TOTAL
Number of Cards Received	125	212	170	234	221	962
Number of Students Enrolled	199	253	229	230	226	1,137
Cards as % of Enrollment	62.8%	83.8%	74.2%	101.7%	97.8%	84.6%

Figure B-8: NUMBER OF REGISTRATION CARDS RECEIVED BY SUMMER SCHOOL CAMPUSES COMPARED WITH THE NUMBER OF STUDENTS ENROLLED.

The information teachers received from calling their students' former teachers is discussed below, under Evaluation Question D3-2.

Evaluation Question D3-2: Were summer school teachers able to reach regular school teachers of assigned retainees?

Of 1,141 students, 592 (51.9%) were to receive phone calls from their early-morning teacher. These teachers were successful in reaching the former teachers of 383 of those 592 students, for a success rate of 64.7%. There are several factors which may have affected this success rate:

1. Former teachers were not informed that they would be contacted on June 3 or 4; many could not be reached.

2. Summer school teachers did not have the former teacher's name or phone number. This necessitated summer school teachers calling the secretaries of their students' schools, finding out the teachers' names, and finding out the teachers' phone numbers from the AISD directory.

Evaluation Question D3-3: Were teachers able to visit the home of assigned retainees?

Of 1,141 students, 144 (12.6%) were designated to receive a home visit by both the student's math and reading teachers. Of these 144, 140 (97.9%) resulted in home visits. It is unknown what proportion of these actually were joint visits and what proportion were visits involving only one teacher. Teachers were more successful in making home visits than in contacting former teachers; it is interesting that teachers reported home visits to be more useful than calling teachers (see Appendix H, Teacher Survey).

Evaluation Question D4-5: Can any variables be identified that relate to student achievement?

The data pertinent to this evaluation question will not be available until the final report in June of 1983.

	UNITS REQUIRED GRADE 1										OPTIONAL		
	Word Attack/ Study Skills					Comprehension					Word Attack		
	2: Sight Words I	4: Sight Words II	7: Sight Words III	9: Sight Words IV	8: Compound Words	5: How and Why Questions	6: Context Clues I	7: Context Clues II	8: Words That Describe		4: Titles		
NO. OF CLASSES COVERING OBJECTIVE	17	17	17	17	16	17	16	16	14		3		
NUMBER OF DAYS TO TEACH OBJECTIVE	4.9	3.3	4.5	3.6	4.5	4.1	4.9	5.9	4.3		2.7		
NUMBER OF TEACHERS REPORTING	8	8	8	8	8	8	8	8	7		3		

Figure B-1. AVERAGE NUMBER OF DAYS TO TEACH FIRST-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

	GRADE: 2 COMPREHENSION										
	REQUIRED								OPTIONAL		
	3: IMAGERY IN READING	4: CAUSE AND EFFECT	10: INFERENCE I	12: INFERENCE II	6: CATEGORIZING				7: SENTENCE MEANING		
NO. OF CLASSES COVERING OBJECTIVE	12	12	12	12	9				3		
NO. OF DAYS TO TEACH OBJECTIVE	5.3	4.5	4.7	5.0	4.8				7.0		
NO. OF TEACHERS REPORTING	6	6	6	5	5				2		

Figure B-2. AVERAGE NUMBER OF DAYS TO TEACH SECOND-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

	GRADE: 3 COMPREHENSION									
	REQUIRED							OPTIONAL		
	2: SENTENCES IN SEQUENCE	4: CAUSE AND EFFECT	5: USING CONTEXT CLUES	6: CATEGORIZING	7: SENTENCE MEANING			INFERENCE I	TITLES/MAIN IDEA	
NO. OF CLASSES COVERING OBJECTIVE	9	9	9	9	8			3	5	
NO. OF DAYS TO TEACH OBJECTIVE	4.5	3.8	4.2	4.0	5.0			2.0	2.0	
NO. OF TEACHERS REPORTING	4	2	4	4	4			1	2	

Figure B-3. AVERAGE NUMBER OF DAYS TO TEACH THIRD-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

82-F

	GRADE: 4 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: CATEGORIZING	2: COMPARISONS I	4: COMPARISONS II	5: PICKING BEST ANSWER	8: CAUSE AND EFFECT	9: FACT AND OPINION			3: MAKING SENSE	10: FINDING THE RIGHT ANSWER	
NO. OF CLASSES COVERING OBJECTIVE	14	14	14	14	14	14			8	8	
NO. OF DAYS TO TEACH OBJECTIVE	2.8	2.7	2.2	4.0	3.3	2.8			1.8	2.8	
NO. OF TEACHERS REPORTING	6	6	6	6	6	6			4	4	

Figure B-4. AVERAGE NUMBER OF DAYS TO TEACH FOURTH-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

	GRADE: 5 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: Content and Message (Independent Activity)	6: Sequence and Patterns	8: Topic Sentences	9: Making Inferences I	12: Problem Solving	13: Fact and Opinion			10: Globes	2: Charts	
NO. OF CLASSES COVERING OBJECTIVE	11	11	11	11	11	11			5	5	
NO. OF DAYS TO TEACH OBJECTIVE	3.0	3.0	4.0	3.3	3.3	3.3			3.0	2.0	
NO. OF TEACHERS REPORTING	4	4	4	4	4	4			1	1	

Figure B-5. AVERAGE NUMBER OF DAYS TO TEACH FIFTH-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

	GRADE: 6 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: CONTENT AND MESSAGE (INDEPENDENT ACTIVITY)	7: STEREOTYPES	8: TOPIC SENTENCES	11: INFERENCES II	12: PROBLEM SOLVING	13: FACT AND OPINION			10: GLOBES	4: GRAPHS	
NO. OF CLASSES COVERING OBJECTIVE	4	4	4	4	3	3			0	0	
NO. OF DAYS TO TEACH OBJECTIVE	(No sixth-grade teachers reported this)										
NO. OF TEACHERS REPORTING	0	0	0	0	0	0			0	0	

Figure B-6. AVERAGE NUMBER OF DAYS TO TEACH SIXTH-GRADE READING OBJECTIVES AS REPORTED BY TEACHERS.

	K	1	2	3	4	5	6
NUMBER OF OBJECTIVES COVERED	10.0	22.1	29.5	41.0	27.8	17.5	-
TEACHERS REPORTING	1	8	8	2	5	2	0

Figure B-7: AVERAGE NUMBER OF MATH OBJECTIVES COVERED IN SUMMER SCHOOL MATH CLASSES BY GRADE.

GRADE 1

ATTENDANCE SHEET

TEACHER

NAME	First Week Dates					Second Week Dates					Third Week Dates					Fourth Week Dates					Fifth Week Dates				
LAST FIRST	7	8	9	10	11	14	15	16	17	18	21	22	23	24	25	28	29	30	1	2	5	6	7	8	9
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
	/	/		A											A										
	/	/																							
	/	/													A					A					
	/	/										A													
	/	/																							
	/	/																							
	/	/																A				A	A		
	/	/																				A			
	/	/																							
	/	/											A												
	/	/																		A					
	/																					A	A	A	A

Attachment B-1

STUDENT DATA CARD for SUMMER SCHOOL 1982

Student's Name____________________ Age____ School__________________ Grade ☐

Student's ID Number________________ Address____________________________

Phone: Home________________ Work________________

INSTRUCTIONAL INFORMATION

Special Programs________________

READING

Basal completed Title________________

Publisher________________

Recommended Instructional Level__________

ITBS 1981 scores Vocabulary__________

Comprehension__________

MATH

Text completed Title________________

Publisher________________

Recommended Instructional Level__________

ITBS 1981 scores Computation__________

Concepts__________

Problem solving__________

HEALTH ALERT

Comments:

ATTENDANCE Days Enrolled________, Days Absent______

Years Enrolled in AISD
(to closest year)____________

Bilingual Program Only

____A ____B ____C ____D ____E

Spanish Reading Basal Title
Level

Attachment B-3

SCHOOL ______________ GRADE ________ TEACHER ______________

STUDENT NAME	**ID NUMBER**	**To Receive Phone Call**	**To Receive Home Visit**	**Received Phone Call**	**Received Home Visit**	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
No. in class _____		No. chosen to call_____	No. chosen HV _______	No. Reached ___ (___%)	No. Reached ____ (___%)	

Attachment B-4

				Days	Days		Reading Skills											Math
Student's Name	ID #	Reading Teacher, #	Math Teacher, #	enrolled	absent	Grade	1	2	3	4	5	6	7	8	9	10	11	%

FILE LAYOUT

PAGE 1 OF 1

☐ LABELED ☐ UNLABELED

LABEL ID ________

TAPE NO. ________

BY: ________

BLOCKSIZE ________ CHARACTERS

DATE CREATED ________

RECORD SIZE ________ CHARACTERS

DENSITY ________ BPI

SEQUENCE ________

DESCRIPTION [illegible]

REMARKS ________

NO. of COLS.	COLUMNS		DATA FORMAT	FIELD NAME	REMARKS
	FROM	TO			
15	1	15	A	TEACHER LAST NAME	
2	16	17	F	ASSIGNED TEACHER NUMBER	
1	18	18	F	SUBJECT AREA (	1 = READING 2 = MATH 3 = LEP)
1	19	19	A	GRADE LEVEL TAUGHT	
7	20	20	F	READING OBJECTIVE #1 - DAYS TO COMPLETE	
1	21	21	F	#2 - DAYS TO COMPLETE	
1	22	22	F	#3	
1	23	23	F	#4	
1	24	24	F	#5	
1	25	25	F	#6	
1	26	26	F	#7	
1	27	27	F	#8	
1	28	28	F	#9	
1	29	29	F	#10	
1	30	30	F	#11	
2	31	32	C	# MATH OBJECTIVES COVERED	

Summer School Pilot Project

Appendix C

EMPLOYEE MASTER FILE

Instrument Description: Employee Master Record File

Brief description of the data file:

The Employee Master Record File is a personnel file maintained by the Office of Staff Personnel. The Employee Master Record (EMR) File contains information on each employee's date of employment, position, sex, ethnicity, education, certification, and years of experience in education. The 1981-82 file was used in compiling data for this appendix.

Which students or other individuals are included on the file?

All personnel employed by the district are included in the Employee Master Record File, although only summer school teachers were included in the analyses for this appendix.

How often is information on the file added, deleted, or updated?

Data are collected and updated throughout the year.

Who is responsible for changing or adding information to the file?

Information is collected by the Office of Staff Personnel, and data are entered by the the Department of Planning and Programming.

How was the information contained on the file gathered?

The EMR File has been a long-term data collection effort of the Office of Staff Personnel and the Department of Planning and Programming.

Are there problems with the information on the file that may affect the validity of the data?

Some of the information contained on the File may be incorrect or out-of-date at times.

What data are available concerning the accuracy and reliability of the information on the file?

None.

Are there normative or historical data available for interpreting the results?

No.

Brief description of the file layout:

See Attachment C-1

EMPLOYEE MASTER FILE

Purpose

Employee records were accessed to provide information relevant to the following decision and evaluation question:

> Decision Question D1: Were the students served and staffing of summer schools appropriate for future summer schools? Are alterations necessary?
>
> > Evaluation Question D1-2: What were the characteristics of participating staff by:
> >
> > - Sex
> > - Ethnicity
> > - Years of experience in education
> > - Educational background
> > - Certification.

Procedure

A list of teachers accepting assignments for teaching in the Summer School Pilot Program (SSPP) was obtained from the Office of Staff Personnel. These teachers' social security numbers were matched with the PERDATA file to create a new file on AISD's IBM 4331 computer. Years of AISD Experience was added to Years of Experience Outside of AISD to create the new variable, Years of Experience in Education. Highest Degree Earned was the variable used to describe educational background. Three certification variables, Type of Certification, Level of Certification, and Area of Certification were used to describe teachers certification status.

Results

Seventy-seven teachers participated in the summer school program. Of these, there were 5 (6.5%) male, and 72 (93.5%) female teachers. A total of 51 (66.2%) teachers were Anglo, 18 (23.4%) were Hispanic, and 8 (10.4%) were Black.

Teachers' years of experience in education ranged from 1 year to 23 years. Median years of experience was 5.85 years and mean years of experience was 8.06 years. The highest degree held by 46 teachers (60%) was the Bachelor's; the other 31 (40%) held Master's degrees.

Figure C-1 shows a breakdown of the number of teachers by subject area and grade level taught:

	Grade						
	1	2	3	4	5/6	LEP	TOTAL
Reading	10	10	5	6	7	2	40
Math	10	10	5	6	7	2	40
Total	20	19*	10	12	13*	3*	77

*: one teacher taught both Math and Reading

Figure C-1: NUMBER OF TEACHERS BY SUBJECT AREA AND GRADE LEVEL TAUGHT.

Teachers are listed on the PERDATA file as holding from one to four certificates. Most of the 77 teachers (89.6%) had provisional certification, and most (89.6%) held primary certification for the elementary level. The other 8 teachers had elementary certification as their second, third, or fourth type of certification. Of all 77 teachers, 21 (27.3%) were also certified in Special Education, 8 (10.4%) were also certified for Professional Service and 10 (13.0%) were also certified to teach high school.

Most teachers (70%) had a general subject area certification. Sixteen of the 77 teachers (20.8%) were certified to teach bilingual classes, 8 of the 77 (10.4%) were certified as reading teachers, and 5 of the 77 (6.5%) were certified as math teachers.

82-F

Attachment C-1
(Page 1 of 2)

FILE LAYOUT

☐LABELED ☐UNLABELED

PAGE ___ OF ___

LABEL ID ____________ TAPE NO. ____________ BY: ____________

BLOCKSIZE ________ CHARACTERS ____________ DATE CREATED: ____________

RECORD SIZE ______ CHARACTERS ____________ SUG. SCRATCH DATE: ____________

____________ DENSITY __________ BPI

SEQUENCE ____________

DESCRIPTION Summer School Teacher Characteristics

REMARKS ____________

NO. OF COLS.	COLUMNS FROM	COLUMNS TO	DATA FORMAT	FIELD NAME	REMARKS
9	1	9		SS#	
2	10	11		Assigned teacher #	
15	12	26		Last name	
10	27	36		First name	
1		37		Sex	
1		38		Ethnicity	
2	39	40		Yrs. exp. in Ed	(InAISD + OutAISD)
1		41		Highest degree held	5=BA 6=MA 7=PhD
1		42		Type	Certification 1
2	43	44		Level	
3	45	47		Area	
1		48		Type	" 2
2	49	50		Level	
3	51	53		Area	
1		54		Type	" 3
2	55	56		Level	
3	57	59		Area	
1		60		Type	" 4
2	61	62		Level	
3	63	65		Area	
2	66	67		# of students in SS class	
1		68		Subject Area 1=R 2=M 3=LEP	Morning (we think)
1		69		Grade level taught	
1		70		Days to complete reading objective #1	
1		71		" #2	
1		72		" #3	
1		73		" #4	
1		74		" #5	
1		75		" #6	
1		76		#7	

Attachment C-1
(Page 2 of 2)

FILE LAYOUT

☐ LABELED ☐ UNLABELED

PAGE ____ OF

LABEL ID ____________ TAPE NO. ____________

BY: ____________

BLOCKSIZE ________ CHARACTERS ____________

DATE CREATED: ____________

RECORD SIZE ______ CHARACTERS ____________

SUG. SCRATCH DATE: ____________

____

DENSITY ____________ BPI

SEQUENCE ____________

DESCRIPTION ____________

REMARKS ____________

NO. OF COLS.	COLUMNS FROM	TO	DATA FORMAT	FIELD NAME	REMARKS
1		77		Days to complete reading objectives # 8	
1		78		" # 9	
1		79		" # 10	
1		80		" # 11	
2	81	82		# Math objectives covered	
2	83	84		# students enrolled in class	
2	85	86		# students w/ registration cards	
1		87		Subject Area 1,2,3 Lite Morning	
1		88		Grade level taught	
1		89		Days to complete reading objective #1	
1		90		" #2	
1		91		" #3	
1		92		" #4	
1		93		" #5	
1		94		" #6	
1		95		" #7	
1		96		" #8	
1		97		" #9	
1		98		" #10	
1		99		" #11	
2	100	101		# math objectives covered	
2	102	103		# students enrolled in class	
2	104	105		# students w/ registration cards	

Summer School Pilot Project

Appendix D

CLASSROOM OBSERVATIONS

Instrument Description: Pupil Activities Record-Revised (PAR-R)

Brief description of the instrument:

The Pupil Activities Record—Revised (PAR-R) is a systematic observation instrument designed to answer—"What is the amount and kind of instruction provided to students during an instructional day?" One student is observed for an entire school day to provide an inferential measure of the instruction delivered to all students. The PAR-R was designed originally to observe the activities in Title I, Title I Migrant, Title VII, and Local/State Bilingual classrooms. The variables observed during the 1982 Summer School Pilot Project for retainees include type of instruction (reading or math), language of instruction, adult contact, group size, on-task/off-task, mode of instruction, and two variables which were constructed especially for this program: engaged in assessment activities and receiving contingent or non-contingent program rewards.

To whom was the instrument administered?

A total of 70 first-, second-, and fifth-grade students from all five campuses of the 1982 summer school program were observed for an entire instructional day.

How many times was the instrument administered?

One full-day observation per student. For three students, two observers observed on one day in order to assess inter-rater agreement.

When was the instrument administered?

June 7th - July 9th, 1982.

Where was the instrument administered?

On all five campuses of the elementary summer school: Becker, Brooke, Cook, Maplewood, and St. Elmo Elementary schools. Observations took place in the classrooms where students were receiving instruction.

Who administered the instrument?

Three graduate students from UT departments of Psychology and Educational Psychology. These students had received advanced training in behavioral assessment and classroom observation.

What training did the administrators have?

Observers received five hours of training involving coding from videotapes of classroom instruction.

Was the instrument administered under standardized conditions?

Classroom situations varied.

Were there problems with the instrument or the administration that might affect the validity of the data?

Yes. It was often not clear whether the teacher was engaging in assessment, or whether the activity which looked like assessment was actually an instructional activity. In most cases, this was clarified by consulting the classroom teacher. Some teachers may have altered their behavior while being observed; teachers usually did not know which child was being observed so these effects would be minimized, but teachers sometimes knew who was being observed.

Who developed the instrument?

Office of Research and Evaluation staff.

What reliability and validity data are available on the instrument?

Inter-rater agreement was assessed using intraclass correlation coefficients for each of the coded categories. The majority of coefficients range between approximately 0.85 and 0.99.

Are there norm data available for interpreting the results?

Other programs have collected data regarding the amount of time students spend engaged in various activities, but there are no previous data regarding retainees nor regarding retainees in summer school.

CLASSROOM OBSERVATIONS

Purpose

Observations of classroom instruction were made to provide information relevant to the following decision and evaluation questions regarding the 1982 Summer School for Retainees:

> Decision Question D2: Was the structure of summer school appropriate for future summer schools? Are alterations necessary?
>
> > Evaluation Question D2-5: How were student learning needs assessed and monitored?
> >
> > Evaluation Question D2-6: What was the planned and actual pupil/teacher ratio?
> >
> > Evaluation Question D2-7: How much of the math and reading allotted time was spent on task?
> >
> > Evaluation Question D2-8: Were award systems implemented as planned? How many students earned the awards?
> >
> > Evaluation Question D2-10: How much time did students interact with the teacher? How much time did students work on their own?
>
> Decision Question D3: Should additional information be provided to teachers about the students before the start of future summer school programs?
>
> > Evaluation Question D3-5: How much time did teachers spend in assessing students' skills? Did teachers spend more time on this activity during the first week of summer school?

Procedure

The Pupil Activities Record - Revised (PAR-R) was used to obtain information regarding classroom instruction. This instrument provides an estimate of the amount of time a child is engaged in specific instructional activities. An interval-rating system is used to record behavior; this involves observing the student for 40-45 seconds, and then 15-20 seconds for recording the predominant activity observed. Following recording, the cycle is repeated again. Observers only recorded data during math and reading classes.

Two of the observers were randomly assigned to schools, then randomly assigned to either grade 1, 2, or 5, and then randomly assigned to a teacher. The observers were to randomly select a student for observation and two alternates from class lists. The observer was to ask the teacher to identify all three children, so that the teacher would not know which of the three children was being observed. The observed child was observed for the length of the instructional day.

The other observer was the only one of the three who was fluent in Spanish. She was randomly assigned to the three LEP/ESL classes at Brooke Elementary for three days each week, and was assigned to classes in grades 1, 2, and 5 in the other four schools for the other two days.

Complete details of the variables recorded and the scoring system are contained in the Manual for the Use of the Pupil Activities Record - Revised (PAR-R) (ORE, 1978:78.48).

The variables chosen for observation were the following:

1. Child is engaged in a non-instructional activity (child is given directions, child is engaged in housecleaning, teacher is engaged in class control (discipline), there is a transition in instruction, or other non-instruction).
2. Child is engaged in basic skills instruction (Reading, Math).
3. Child is in direct contact with the teacher, with an aide, with peers, or working alone.
4. Child is on-task or off-task.
5. Language of instruction (English, Spanish, or mixed).
6. Predominant mode of instruction (reading, writing, listening, speaking, or a non-language activity).
7. Child is engaged in an assessment activity.
8. Child is receiving a program reward (scented sticker) contingent upon good behavior or good academic performance, the child receives a program reward non-contingently, or the child does not receive a reward.
9. Class size (the number of children present in the classroom).
10. Group size (the number of students in the child's instructional group).

Three observers were hired to conduct daily observations. These observers were Ph.D. students in the School Psychology and Community Psychology programs at the University of Texas and each had completed advanced training in behavioral assessment and classroom observation.

They received five hours of training in using the PAR-R system to record classroom instruction from videotape subsequent to studying the PAR-R manual. During the first week of observations, the evaluation intern visited each observer at least once for an hour and a half of co-observation. This was for the purpose of calibrating observers' responses to similar classroom events. Observers met with the evaluation intern once a week throughout the five-week observation period to discuss events which were difficult to score and to re-calibrate the scoring system. During the last week of summer school, inter-rater agreement checks were made by having the evaluation intern co-observe with each observer for a full day.

Observations were recorded on the PAR-R scoring sheet contained in Attachment D-1. This form is optically scannable. Each form was checked for logic errors. For example, if "non-instruction" was coded for one minute, "Basic Skills instruction" should not be recorded for that minute. Corrections were made by observers and checked again by the logic program. When all errors had been corrected, summary statistics were generated.

A total of 70 observations were made by the three observers; 25 observations in first grade, 25 in second, and 20 in fifth grade grade classrooms. Becker and Cook schools each had 13 observations, Maplewood and St. Elmo each had 12 observations, and Brooke school had 20 observations (Brooke is where LEP classes were held).

Results

Results are discussed in terms of evaluation questions:

Evaluation Question D2-5: How were student learning needs assessed and monitored?

Observations were used to answer this question, as well as Project Records (Appendix E). Reading teachers had information about their students' Iowa Test of Basic Skills (ITBS)-Comprehension and Vocabulary scores, the reader that the student used last year, and the reading level as recommended by last year's teacher. Math teachers had ITBS-Computation and Concepts scores. The reading curriculum was prescribed, but there was much flexibility in the objectives that math teachers could teach. In addition, both the math and the reading curriculum required testing students after each unit, and re-testing students who failed the first test after they were further instructed.

It might therefore be expected that much instructional time would be spent in assessment. However, of 8,125 observed minutes in basic skills, 425 minutes, or 5.2% of the time was spent in assessment. The observers noted, however, that this was a difficult activity to score; often what "looked like" assessment had instructional purposes. For example, students did a workbook exercise on their own while their teacher walked around to check their work. There was more time spent in doing assessment in math class than there was in reading class (6.6% vs 4.6%); and there was slightly more assessment occurring during the first week as compared with the following weeks (6.3% vs. 5.0%).

Evaluation Question D2-6: What was the planned and actual pupil/teacher ratio?

As noted in Appendix E (Project Records), summer school was originally planned so that there would be one teacher for every 15 students. The actual number of enrolled students was 1,193 (see Summer School Student File, Appendix A), distributed among 77 teachers, resulting in 15.5 students per teacher. Two teachers had as few as 9 students enrolled, and one teacher had 29 enrolled. The pupil/teacher ratio, based on the number of students present was of course lower; 12 students for every teacher, with 4 observed classes having as few as 8 and 2 having as many as 17 present. These values are based on observations; only a sample of classrooms could be observed and most classrooms were observed only once. There may have been classrooms with fewer or with more students on some days.

Evaluation Question D2-7: How much of the math and reading time was spent on-task?

Time on-task was recorded only if the teacher was engaged in basic skills instruction. About 116 minutes (64.4%) on the average, out of 180 minutes allotted for basic skills instruction, was spent engaged in basic skills instruction. The other 64 minutes was spent in non-instruction. Most of this activity (24 minutes, or 13.8%) was "other" non-instruction: defined as "settling in" time, roll call, or other miscellaneous situations where the student was not receiving instruction for reasons beyond the student's control. An average of 21 minutes, or 11.7% of the time allotted for instruction, was spent in transition from one instructional activity to another, (such as putting away materials or getting out materials, erasing blackboards, or lining up). About 13 minutes, or 7% of the time allotted for instruction, was spent in giving directions to students. About 2 minutes (1.2%) was spent in class control, and 1 minute (0.6%) was spent in housecleaning.

Of the actual engaged instructional time (116 minutes), students were on-task for 103 minutes or for 88.5% of engaged instructional time. This compares with 90.7% of engaged time on-task reported for 1980-81 for Title I students during the regular academic year (Title I students spent a daily average of 2 hours and 56 minutes on-task during 3 hours and 16 minutes of basic skills instruction: ORE, 80.71).

Evaluation Question D2-8: Were award systems implemented as planned? How many students earned the awards?

There were two award systems which were installed as part of the program. Calculators were given to students to use during the program and to keep if they met standards for good attendance. As discussed in Appendix E (Project Records), 72.5% of enrolled students received calculators for good attendance.

Observers recorded instances in which a student received a programmatic reward (scented sticker) for good performance. They only recorded this if the student they were observing received a sticker. Children were observed receiving stickers 168 times; because there were 70 children observed, this averages 2.4 stickers per child per day. The observers further noted if the scented sticker was given to the child contingent on that child's good behavior or good academic performance, or if there appeared to be no connection between the child's behavior and the reward he received. In the latter case, observers attempted to determine if the contingency was simply not obvious by writing down as many details as they could about the incident and then asking the teacher about the reasons for the reward at a convenient time.

Observers recorded that 152 (90.5%) of the rewards appeared to be given contingently, while 16 (9.5%) were not. Most teachers appeared to be using the rewards appropriately.

Evaluation Question D2-10: How much time did students interact with the teacher? How much time did students work on their own?

During basic skills instruction, observers recorded whether or not a student was receiving direct contact from the teacher, and the size of the group in which the student was being instructed. If the student was by herself, no adult contact was coded and Group Size was coded as "1".

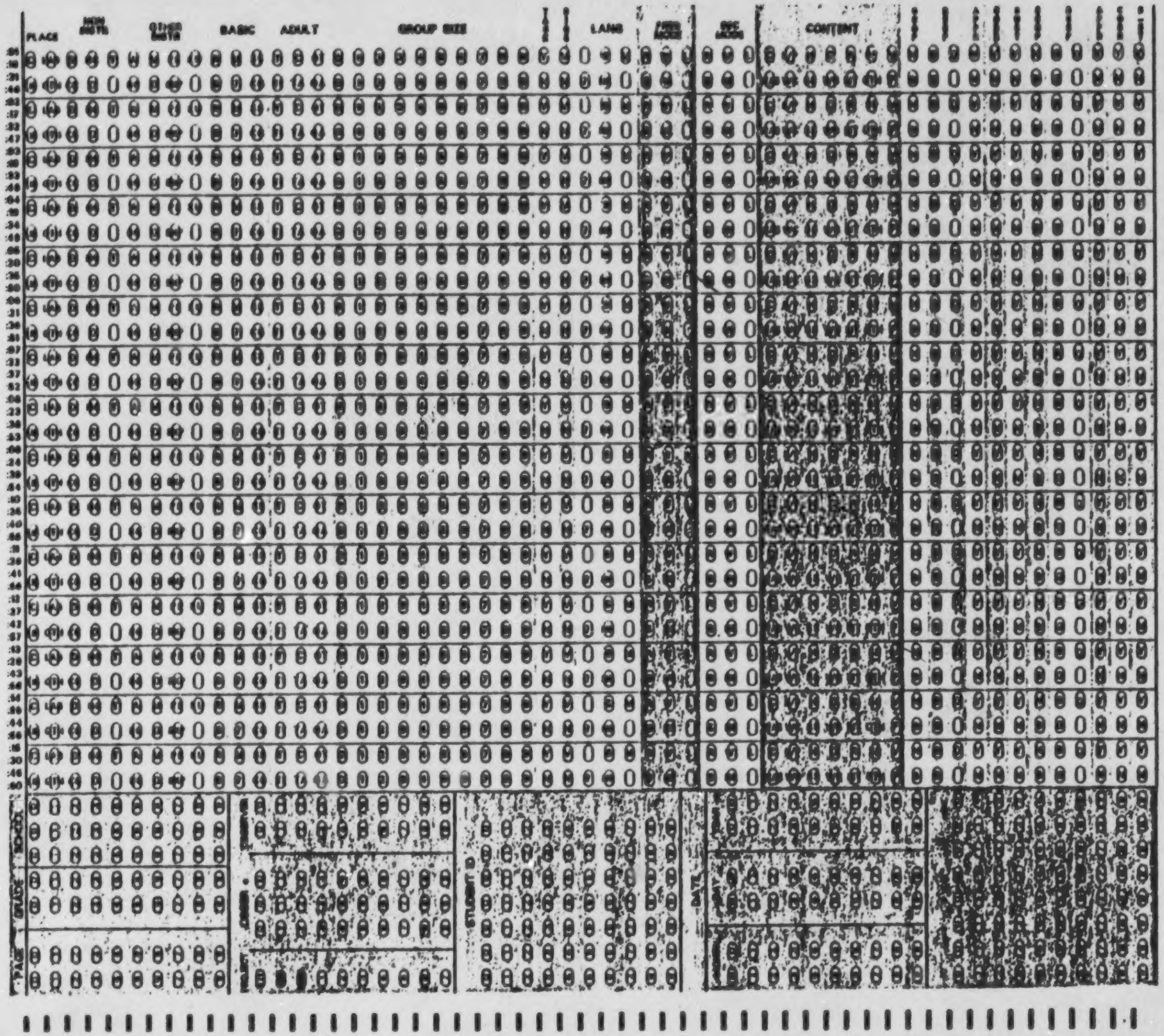
Students spent 63.1% of their time during basic skills in direct contact with the teacher. A small amount of time (0.2%) was spent with an adult other than the teacher; students were working without adult contact for 36.7% of the time engaged in basic skills instruction.

Students worked by themselves for 37% of the time in basic skills. When students were not working by themselves, they worked in groups whose average size was 11.7 students. Peer tutoring, which would have been scored as a group size of two to four students, accounted for, at most, 2.4% of students' time in basic skills.

A note about the reliability of the observational system: Inter-rater agreement was determined by comparing ratings made by the evaluation intern while co-observing with observers during the last week of summer school. Observations for this purpose covered 316 minutes of classroom instruction. The intraclass correlation coefficient was used to measure the consistency of the ratings. This correlation assesses judgemental consistency by indicating the relative excess of among-subjects over among-raters variation. Observation totals were compared using program INTRAR of the EDSTAT statistical package on the IBM 1443 computer.

Reliabilities exceeded .99 for whether or not basic skills instruction was occurring, for student on-task and student off-task, for when the student was engaged in writing or listening. Reliabilities exceeded .90 for occurrence of instructional transitions, for contact with an adult, for group size, and for language spoken. Reliability was not established for other non-instruction (r=.12), for direction-giving (r=.51), or for class control (r=.69). Reliability could not be established for assessment, reward, or student engaged in speaking, because this behavior occurred only once or did not occur during observations for establishing inter-rater agreement.

D-9


PLACE
NON DISTR
OTHER DISTR
BASIC
ADULT
GROUP SIZE
LANG
PRES MODE
REC MODE
CONTENT
NOTES

PUPIL ACTIVITIES RECORD REVISED
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OFFICE OF RESEARCH AND EVALUATION
AUSTIN INDEPENDENT SCHOOL DISTRICT

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Attachment D-1

Attachment D-2

Frequency Distributions of PAR-R Variables

```
TITLE I FREQUENCY DISTRIBUTION PROGRAM -- SUMMER SCHOOL 1982 -- EAF-R OBSERVATIONS

# VARIABLES =     5
MISSING DATA= YES
VAR. LABELS = YES
INPUT FORMAT=(2X,I2,7X,F2.0,F3.0,F2.0,F6.0,F2.0)
VARIABLES WITH MISSING DATA   1    1    1    1    1
VALUES OF MISSING DATA        0.   0.   0.   0.   0.
         5.        136.          1.      60782.         12.
         2.        122.          2.      60782.         13.
         1.        161.          3.      60782.         10.
         1.        108.          1.      60482.         14.
         1.        161.          2.      60882.         11.
         2.        136.          3.      60882.         15.
         1.        161.          1.      60982.          9.
         2.        104.          2.      60982.          9.
         5.        108.          3.      60982.         17.
         1.        122.          1.      61082.         14.
         2.        136.          2.      61082.         15.
         5.        104.          3.      61082.         15.
         2.        108.          1.      61182.         12.
         2.        104.          2.      61182.          9.
         1.        [illegible]   3.      61182.         11.
         1.        108.          1.      61482.         12.
         2.        161.          2.      61482.         13.
         5.        104.          3.      61482.         11.
         2.        108.          1.      61582.         14.
         2.        122.          2.      61582.         14.
         5.        136.          3.      61582.         12.
         5.        136.          1.      61680.         13.
         1.        108.          2.      61682.         12.
         5.        122.          3.     601682.         12.
         2.        108.          1.      61782.         14.
         2.        161.          2.      61782.         11.
         1.        122.          3.      61782.         14.
         5.        136.          1.      61882.         13.
         2.        104.          2.      61882.          8.
         5.        161.          3.      61882.         13.
         5.        108.          1.      62182.         11.
         2.        122.          2.      62182.         11.
         5.        161.          3.      62182.         14.
         2.        108.          1.      62280.         13.
         2.        161.          2.      62282.         13.
         5.        104.          3.      62282.         15.
         5.        136.          1.      62382.         10.
         2.        108.          2.      62382.          9.
         5.        122.          3.      62382.         16.
         1.        108.          1.      62482.         12.
         5.        104.          2.      62482.         11.
         5.        161.          3.      62582.         13.
         1.        136.          1.      62582.         10.
         5.        108.          2.      62582.         11.
         5.        161.          1.      62882.         12.
         2.        104.          3.      62580.          9.
         5.        122.          3.      62882.         17.
         1.        104.          2.      62982.         13.
         1.        161.          3.      62982.         11.
         1.        108.          1.      63082.         11.
         1.        104.          2.      [illegible]    10.
         1.        13
```

Attachment D-2
Page 1 of 9

```
  2.      122.        1.     70282.       12.
  1.      108.        2.     70282.       14.
  1.      104.        3.     70200.       13.
  5.      108.        1.     70582.       12.
  2.      108.        2.     70682.       11.
  1.      161.        3.     70682.        9.
  1.      108.        1.     70782.       10.
  2.      161.        3.     70782.       12.
  1.      108.        1.     70882.       11.
  1.      104.        3.     70882.        8.
  1.      136.        3.     72882.       12.
  2.      108.        1.     62982.       14.
  1.      122.        2.     70982.       10.
  1.      104.        3.     70982.        8.
  2.      136.        1.     70982.       13.
```

```
SUMMER SCHOOL 1982 -- PAR-P OBSERVATIONS

FREQUENCY DISTRIBUTION FOR VARIABLE # 2 (SCHOOL                    )

                            RELATIVE  ADJUSTED  CUMULATIVE
                 ABSOLUTE    FREQ       FREQ       FREQ
       CODE        FREQ     (PCT.)     (PCT.)     (PCT.)

Burke 104.00        13.       18.6       18.6       18.6

Broome108.00        20.       28.6       28.6       47.1

PW.   122.00        12.       17.1       17.1       64.3

St.   136.00        12.       17.1       17.1       81.4

Cok   161.00        13.       18.6       18.6      100.0

       TOTAL        70.      100.0      100.0

  VALID CASES=     70
  MISSING CASES=    0

  MEAN=   124.3000            VARIANCE=  433.1406
  STD. DEV=   20.8120         STD. ERR=    2.4875
  MAXIMUM=  161.0000          MINIMUM=  104.0000
  RANGE=    58.0000
```

```
SUMMER SCHOOL 1982 -- PAR-R OBSERVATIONS

FREQUENCY DISTRIBUTION FOR VARIABLE # 1 (GRADE           )

                        RELATIVE  ADJUSTED  CUMULATIVE
             ABSOLUTE     FREQ      FREQ       FREQ
    CODE       FREQ      (PCT.)    (PCT.)     (PCT.)

    1.00        25.       35.7      35.7       35.7

    2.00        25.       35.7      35.7       71.4

    5.00        20.       28.6      28.6      100.0

   TOTAL        70.      100.0     100.0

VALID CASES=    70
MISSING CASES=     0

MEAN=      2.5000          VARIANCE=     2.7174
STD. DEV=     1.6485       STD. ERR=     0.1970
MAXIMUM=      5.0000       MINIMUM=    1.0000
RANGE=     5.0000
```

```
SUMMER SCHOOL 1982 -- PAPER OBSERVATIONS

FREQUENCY DISTRIBUTION FOR VARIABLE # 3 (OBSERVER #          )

                         RELATIVE  ADJUSTED  CUMULATIVE
              ABSOLUTE     FREQ      FREQ       FREQ
   CODE         FREQ      (PCT.)    (PCT.)     (PCT.)

   1.00          24.       34.3      34.3       34.3

   2.00          21.       30.0      30.0       64.3

   3.00          25.       35.7      35.7      100.0

  TOTAL          70.      100.0     100.0

VALID CASES=    70
MISSING CASES=     0

MEAN=      2.0143          VARIANCE=     0.7099
STD. DEV=     0.8426        STD. ERR=     0.1007
MAXIMUM=     3.0000        MINIMUM=     1.0000
RANGE=     3.0000
```

```
SUMMER SCHOOL 1982 -- PAN-R OBSERVATIONS

FREQUENCY DISTRIBUTION FOR VARIABLE # 5 (CLASS SIZE

                         RELATIVE  ADJUSTED  CUMULATIVE
              ABSOLUTE     FREQ      FREQ       FREQ
    CODE        FREQ     (PCT.)    (PCT.)     (PCT.)

     8.00        4.        5.7       5.7        5.7

     9.00        6.        8.6       8.6       14.3

    10.00        6.        8.6       8.6       22.9

    11.00       12.       17.1      17.1       40.0

    12.00       13.       18.6      18.6       58.6

    13.00       11.       15.7      15.7       74.3

    14.00       10.       14.3      14.3       88.6

    15.00        5.        7.1       7.1       95.7

    16.00        1.        1.4       1.4       97.1

    17.00        2.        2.9       2.9      100.0

    TOTAL       70.      100.0     100.0

VALID CASES=    70
MISSING CASES=     0

MEAN=    12.0286           VARIANCE=     4.5789
STD. DEV=     2.1398       STD. ERR=     0.2559
MAXIMUM=    17.0000        MINIMUM=     8.0000
RANGE=    10.0000
```

$MED = 11.5 + 1\left(\frac{35-28}{13}\right)$

$MED = 12.04$

Reliabilities

Combined

```
// ASSGN SYS004,SYSPDP                                          0790
// EXEC                                                         0800

# OBSERVATIONS =     6
TOTAL # MINUTES WITH ACTIVITY CODED =        632


PLACE

   1         632. 100.0%


NON-INSTRUCTION

   1          21.   3.3%
   2          16.   2.5%
   3          74.  11.7%
   4           7.   1.1%
   5          51.   8.1%


BASIC SKILLS

   1         231.  36.6%
   2         232.  36.7%


ADULT #s

   1         271.  42.9%


ON/OFF TASK

   1         399.  63.1%
   2          64.  10.1%


LANGUAGE

   1         403.  63.8%
   2          59.   9.3%
   3           1.   0.2%


PREDOMINANT MODE

   1           5.   0.8%
   2         104.  16.5%
   3         226.  35.8%
   4 [illegible]
   5 [illegible]
```

Attachment D-2
Page 7 of 9

```
ASSESSMENT

   1          1.   0.2%
   2        462.  73.1%


REWARD

   1          1.   0.2%


AVERAGE GROUP SIZE DURING BASIC SKILLS =   7.0
```

```
TOTAL NUMBER OF MINUTES IN BASIC SKILLS =      463


ADULT #

  1        271.  58.5%


ON/OFF TASK

  1        399.  86.2%
  2         64.  13.8%


LANGUAGE

  1        403.  87.0%
  2         59.  12.7%
  3          1.   0.2%


PREDOMINANT MODE

  1          5.   1.1%
  2        104.  22.5%
  3        226.  48.8%
  4          8.   1.7%
  5        120.  25.9%


ASSESSMENT

  1          1.   0.2%
  2        462.  99.8%


REWARD

  1          1.   0.2%
```

Summer School Pilot Project

Appendix E

PROJECT RECORDS

87

Instrument Description: Project Records

Brief description of the instrument: Project Records include information from a number of sources which provided descriptive information on the summer school program. Sources included: the AISD grant application to TEA, the publishers' descriptions of curriculum materials, inservice materials developed by AISD staff, and personal communications with AISD staff through conversations and memos.

To whom was the instrument administered?
Administrators and teachers involved in summer school planning and implementation.

How many times was the instrument administered?
On numerous occasions.

When was the instrument administered?
At various times before, during, and after the summer school session.

Where was the instrument administered?
At various locations.

Who administered the instrument?
ORE staff as appropriate.

What training did the administrators have?
N/A.

Was the instrument administered under standardized conditions?
No.

Were there problems with the instrument or the administration that might affect the validity of the data?

None that are known.

Who developed the instrument?

ORE staff formulated questions.

What reliability and validity data are available on the instrument?

None (N/A).

Are there norm data available for interpreting the results?
N/A.

PROJECT RECORDS

Purpose

Project Records were reviewed to provide information applicable to the following decision and evaluation questions:

> Decision Question D2: Was the structure of summer school appropriate for future summer schools? Are alterations necessary?
>
> > Evaluation Question D2-2: What did the math curriculum include?
> >
> > Evaluation Question D2-3: What did the reading curriculum include?
> >
> > Evaluation Question D2-4: Who planned the program and what aspects did they organize?
> >
> > Evaluation Question D2-5: How were student learning needs assessed and monitored?
> >
> > Evaluation Question D2-6: What was the planned and actual pupil/teacher ratio?
> >
> > Evaluation Question D2-8: Were award systems implemented as planned? How many students earned the awards?
> >
> > Evaluation Question D2-13: Did parents receive information about activities to do with their children for the rest of the summer after summer school was completed? How much did they complete?

Procedure

Project Records refer to a number of data sources which provide descriptive information about the summer school program. Some of this information described the program as planned, and other project records yielded information about the program as implemented. Sources of information about the program as planned included: the AISD grant application to TEA; descriptions contained in promotional materials distributed by the curriculum publishers, the materials themselves, information given to teachers at in-service sessions, and personal communications/memos from planning staff. Descriptions of the program as planned are supplemented by descriptions of the program as implemented. The sources of implementation data are: observations (Appendix D), the Teacher Survey (Appendix H), and personal communications with program administrators and teachers.

After a general project description, results are discussed below by evaluation question.

Results

General Description: The 1982 summer school for retainees, conducted from June 7 to July 9, 1982, enrolled 1,193 students in Grades K through 6 and was situated at Becker, Brooke, Cook, Maplewood, and St. Elmo elementary schools. These students were served by 77 teachers for an overall ratio of 15.5 students for each teacher.

Enrollment was originally to be done at the regular 1981-82 schools until mid-May with an opportunity to sign up on the first day at the summer school campuses on a "first come, first served" basis based on space available. It was felt, however, that it was important that all retainees from 1981-82 or previous years be served no matter when they enrolled. Enrollment was therefore opened indefinitely. The response to the program was greater than expected and the original estimate of 900 students to be served at three campuses was exceeded. Brooke and Becker were added as summer school campuses about three weeks before classes began.

The school day lasted from 8:30 - 12:30 and consisted of one-and-a-half hours of reading/language arts, one hour of recreational activity (snack, restroom break, and a community school activity of the student's choice), and one-and-a-half hours of math/applied skills.

Summer school teachers telephoned one-half of their students' former teachers to obtain information about the students' skills. A sample of children's parents were visited by summer school teachers to establish rapport between school and home.

Follow-up activities were conducted in which parents were sent letters about workbook assignments or exercises to be completed during the five weeks following the end of summer school. The evaluation includes questions addressing the effectiveness of these activities.

Summer school teachers were selected on the basis of length of their experience with the District, length of experience at their grade level, recommendations by instructional coordinators and principals, and lack of experience teaching in previous summer schools (see Attachment E-1). After being selected and accepting their assignments, two in-service sessions were held: one, a general overview of the program held at the central administration building, and a second dealing with specifics of the local program and assignment of students to classes held at the local campuses. The general overview session was done twice to accommodate staff added later.

Evaluation Question D2-2: What did the math curriculum include?

The overall objectives of the math curriculum are contained in Attachment E-2. The math materials (Math for Everyone) were developed by the Educational Service Center, Region XIII, and were supplemented by a workbook (Succeeding in Mathematics). Hispanic students of Limited English Proficiency (LEP) received instruction in Spanish using the same materials.

The Math for Everyone series contains a "scope and sequence" plan for each grade level. Specific instructional objectives are provided with the scope and sequence and are grouped according to instructional "strands". Teachers were to give priority to problem solving and numeration, and to teach geometry and measurement as time permitted. Scope and sequence charts are contained in Attachment E-3.

Originally, students were to be assigned specific strands based primarily on their performance on the Iowa Test of Basic Skills (ITBS) and/or the Texas Assessment of Basic Skills (TABS). The information actually used to make these decisions included ITBS subtest scores in reading and math, reading basal and math text levels completed, previous teacher recommendations made by telephone, parent ideas based on home visits, and informal assessments done by the summer school teacher.

The curriculum was to be taught as follows:

. 5 - 10 minutes:	group motivational activities.
. 30 minutes:	large group instruction using Math for Everyone.
. 30 minutes:	small group instruction/independent practice using the Succeeding in Mathematics workbook.
. 20 minutes:	enrichment, using calculators and teacher resource books.

After completing instructional activities for a unit, students were to be given a "formative" test. Students were required to answer 80% of the items correctly to "master" each skill. Students achieving mastery were to work on enrichment activities while those who did not received additional instruction on the same skill unit and were retested with a "summative" test. The number of students passing these tests is discussed in Appendix F (Mastery Records).

Information regarding whether the sequence of math instruction was implemented as planned was gained from three observers with a combined total of 108 hours of observation in summer school math classrooms (see Appendix D, Classroom Observations). Observers were asked what the typical sequence of math instruction was. All three agreed that generally teachers asked questions, had students practice math skills independently, reviewed math skills with students after practice, gave workbook assignments, and then engaged in enrichment activities. The daily "group motivational activities" originally planned did not occur every day. The test-retest sequencing was not as obvious to the observers during the last two weeks as it was during the beginning. Testing did occur, however, and teachers' records were checked during the program to make sure they were being kept correctly. There seemed, to the observers, to be less enrichment activity occurring in first- and second-grade classrooms. Overall, the observers did not notice any great systematic differences between the planned and actual math program. Most math teachers (65%) responding to the Teacher Survey (Appendix G) said the materials should be used again.

Evaluation Question D2-3: What did the reading curriculum include (including materials and equipment?

The overall objectives of the Reading/Language Arts program are listed in Attachment E-2. The Reading materials (Chicago Mastery Learning Reading - CMLR) were developed by the Board of Education of the City of Chicago and published and supported by Mastery Education of Watertown, Massachusetts.

About half of the CMLR time was to be spent in developing word attack/study skills, while the other half was to be spent in improving comprehension skills at first grade. At grades 2 through 6, comprehension was to be the main emphasis for the class. The specific units to be covered are contained in Attachment E-4. Only comprehension activities were carried out in grades other than grade one, as implemented.

CMLR materials were to be presented initially to the entire group. Within each unit, skills were sequenced so that each subskill would be mastered before moving to the next. As in the math program, students were to be given a formative test on the unit on which they received instruction. Students answering at least 80% of the items correctly were to receive CMLR enrichment activities, while those who did not were to receive "corrective" instruction, after which they were again tested. Students available for enrichment activities could also be available as a peer tutor for students needing more remediation or could read a book from the Reading is Fundamental program. A student must have attained 80% correct on the summative test to have mastered the skill unit. For those not achieving this criterion, revfew material was built into the next unit.

CMLR was to be used for one hour. For the other half hour, miscellaneous activities related to language arts could be undertaken: journal writing, library visits, independent reading, story reading in a group, were all suggested activities. The suggested schedule of activities is contained in Attachment E-4.

Impressions of the observers were that teachers most often spent the non-CMLR time reading aloud. This was supported by Teacher Survey results, on which 77% of teachers reported spending at least ten minutes a day in reading aloud during non-CMLR time. Other activities mentioned by teachers were: independent reading, phonics instruction, and vocabulary instruction. Materials from Scholastic (Text Extenders), Modern Curriculum Press (Grade 1), and Houghton-Mifflin (Grades 2-6) were used for reading activities. About 80% of the reading teachers judged the quality of the materials to be good or excellent, and 77% responded that the material should be used again.

Hispanic students with Limited English Proficiency (LEP) in categories A and B were not instructed with the CMLR materials, but were given instruction in Spanish reading, oral language development, vocabulary (on Monday, Tuesday, and Wednesday), and English as a Second Language (ESL) (on Thursday and Friday), using the following materials: Elena y Dani, Caracolitos, Stepping Into English, I Like English Teaching Cards, Language Visuals, and Scholastic Collección.

Implementation of the program proceeded fairly smoothly. Teachers had some questions the first week, but generally adapted quickly.

The number of students attaining mastery of the CMLR units is discussed in Appendix F (Mastery Tests).

Evaluation Question D2-4: Who planned the program and what aspects did they organize?

The Directors of Elementary Management and Curriculum supervised the summer school process. They had primary responsibility for setting up the mechanical operation of the program, including enrollment, student forms, transportation, buildings, and assigning students to campuses. They also consulted with the language arts and math committees as they selected and developed curricula and assisted in planning community school activities. They helped lay out the overall organization and policies of the program at a building level, and helped with staff development.

The language arts and math committees worked on selecting appropriate materials, adapting them to Austin's needs, developing supplemental materials, ordering and delivering materials, assisting directors and teachers while on duty, and providing staff development.

One educational planner and one evaluator developed the grant proposal in consultation with other groups involved and helped set up procedures for preservice phone calls to previous teachers, home visits to parents, and follow-up activities after summer school was over. The educational planner developed instructions and sent out the follow-up activities with the help of a secretary. Research and Evaluation staff developed and duplicated some materials for home visits, teacher calls, and follow-through and provided labels for the mailings.

One district-paid evaluator and one grant-paid intern developed and carried out the evaluation in consultation with all others involved. ORE staff also provided some staff development for summer school teachers and provided information from research during the planning process.

Other AISD administrators and secretaries assisted with some aspects of the program. Personnel's primary duties related to hiring and payroll; transportation helped with assigning and bussing students; the school plant handled utilities and custodial services; and finance worked through monetary paperwork.

Evaluation Question D2-5: How were student learning needs assessed and monitored?

"Student learning needs" were considerations in several decisions made by educational staff. The first such decision involved which grade level a child should be placed in for summer school. This decision depended on the grade level the child would be in in the fall, the level of reading and math skills the child had attained, and the child's chronological age.

This decision was made by summer school directors and teachers during the June 1 in-service sessions. From observations made during in-service sessions, it appeared that criteria for deciding which grade to place a child in was informal and the goal of the decision was that a child would be placed in a grade level where he would most benefit from instruction without feeling out of place. In most cases, the student was placed in the grade in which he would be in the fall.

The second decision requiring an assessment of learning needs was what the child should be taught. In the reading curriculum, those skills to be taught were prescribed by the Reading/Language Arts Committee. In math, teachers were to teach the "numbers and numeration" and "problem solving" strands as priorities, and if there was time, to teach from the "geometry" and "measurement" strands. Within these strands are a number of developmentally-sequenced objectives, ranging in number from 3 (geometry) to 22 (numeration) objectives. Teachers identified where in the objective strands to begin by informally testing students with teacher-made tests, with tests from the Succeeding in Mathematics workbook, or from information supplied by the students' former teachers.

The third type of decision requiring student learning needs information is a diagnostic one: "Does this child need more training to perform this skill successfully?" The information was supplied by the formative tests contained in both the CMLR, and the Math for Everyone packages. If a child failed the formative test, he was given additional instruction in that objective.

The amount of time teachers spent in doing assessment is discussed in Appendix D (Observations).

Evaluation Question D2-6: What was the planned and actual pupil/teacher ratio?

There were 77 teachers serving 1,193 enrolled students for an overall ratio of one teacher for every fifteen students per class. This was the same as the planned ratio. This ratio varied from a low of nine students in two teachers' classes to a high of twenty-nine in another, and the campus means ranged from 14.1 at Cook to 16.5 at Maplewood.

In the classes for LEP students, the ratio was 13 students for each teacher.

Evaluation Question D2-8: Were award systems implemented as planned? How many students earned the awards?

Students had opportunities to earn scented stickers and other rewards for good academic performance and behavior. A total of $2,000 was spent on these rewards. Schools purchased various small incentives once the supply of stickers ran out. Some schools also added snack or other privilege rewards for good attendance each week. Teachers reported a positive response by students and parents to the rewards. Observations indicated that 168 stickers were distributed to 70 children over a period of 22 days. Approximately 27,000 stickers were purchased.

The calculators, which students were learning to use in math class, were offered to students as an incentive to attend summer school. As planned, students absent no more than twice during summer school received calculators at the end of summer school, July 9. Campuses generally excluded any children with more than two unexcused absences from receiving calculators. Originally, 1,200 calculators were purchased; of these, 14 (1.2%) were defective and 827 (69.7%) of the remainder were distributed to students. Because 1,193 students were eligible, this means that 69.3% of the students received calculators at the end of summer school. Since 1,193 students probably did not finish the program, this estimate is actually conservative. Reports from teachers and directors indicated the calculators were a very good incentive--particularly at the intermediate grades.

Evaluation Question D2-13: Did parents receive information about activities to do with their children for the rest of the summer after summer school was completed? How much did they complete?

This question is mainly answered in Appendix I, the results of the Parent Survey. What is presented here is a description of the follow-up process.

One reason hypothesized for the ineffectiveness of most summer schools in producing achievement score gains is that children receive no formal instruction between the end of summer school and the beginning of regular school in September. Follow-up activities were designed to provide continuing support for what the child had learned during summer school.

Parents received ideas on how to work with their children in reading and math for the rest of the summer. Classes of students were randomly assigned to receive a general or specific form of follow-up. This information will allow comparisons of the effectiveness of the two types of follow-up.

In math, all students were allowed to take home their math workbook. One-half of the parents received a letter on the last day of class indicating recommended activities to work on in specific math areas for the rest of the summer. The other half received this general letter plus a follow-up letter each week with specific instructions for workbook pages concerning one math area (see Attachment E-5).

In reading, one-half of the parents received a letter on the last day of class with general ideas on how to help their child with reading for the rest of the summer. The other half received this general letter plus fun reading activities to work on with their child each week for five weeks. Attachment E-6 shows reading letters and activities.

Parents were surveyed at the end of the summer to see what activities were completed. Results will be reported in November.

Teachers who were projected to receive the children in the fall were also informed that the child had been asked to do these activities. The notes sent are shown in Attachment E-7.

Community School Activities:

Attachment E-8 gives a summary of the community school activities and ideas for changes next year. Students' participated in these activities for about 30 minutes during the one-hour break between reading and math. Activities included arts, crafts, table games, and physical education. Staff attempted to provide a balance between indoor and outdoor activities.

Teacher and director survey results indicated that community school activities were beneficial and provided a necessary "break" for students. Some time coordination and staffing ratio problems occurred which can hopefully be improved upon in the future. The student to staff ratio for community school activities was 26 to 1.

Attachment E-1

ELEMENTARY RATING SHEET TO SCORE AND RANK APPLICANTS

+ __________ 1. A.I.S.D. Experience

Years		Points
1-2	=	1
2-5	=	2
6-9	=	3
10-14	=	4
15+	=	5

+ __________ 2. In Grade Assignment

Years		Points
1-2	=	1
3-5	=	2
6-9	=	3
10-14	=	4
15+	=	5

- __________ 3. Taught in previous summer school = -1

+ __________ 4. Competency rating

Unsatisfactory = 0 or 1
Minimally acceptable = 2 or 3
Good/Expected = 4, 5, or 6
Strong = 7 or 8
Exceptional/Model = 9 or 10

__________ TOTAL

Objectives: Short Term

Reading. Skill units to be mastered (along with some optional units) have been specified at each grade level in reading (see Attachment E-4). The overall objective for reading is:

> By the end of the five-week summer school, reading skills specified for each grade level will be mastered by 90% of the retainees participating.

Reading for LEP Students. LEP students (Categories A and B) will be provided with special materials for Spanish reading and English as a Second Language. Objectives for these activities are:

> Spanish Reading: Limited English Proficiency retainees participating in summer school will show 80% accuracy on workbook assessments on the average.
>
> English as a Second Language: Limited English Proficiency retainees participating in summer school will complete at least two levels in the Stepping into English series.

Math. The minimum number of skills to be mastered has been specified for each grade level in math. Beyond this, teachers are to cover as much material as necessary in the areas of greatest demonstrated need for their students. The overall math objective is:

> By the end of the five-week summer school, participating retainees will, on the average, master the number of skills specified for their instructional level at an 80% level.

Objectives: Long Term

Reading.

> As of October 1982, retainees participating in the 1982 summer school will show significantly higher achievement in reading areas emphasized than retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).
>
> As of April 1983, retainees participating in the 1982 summer school will show higher achievement in reading areas emphasized than retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).

Math.

> As of October 1982, retainees participating in the 1982 summer school will show significantly higher achievement in math areas emphasized than retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).
>
> As of April 1983, retainees participating in the 1982 summer school will show higher achievement in math areas emphasized than retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).

Attachment E-3

Math Scope and Sequence Charts

MATH FOR EVERYONE

82-F

Name:____________________________ Teacher:____________________________

Kindergarten: Individual Student Record

Teachers highlight objectives which have been mastered.

Number and Numeration

N 1 Members of Sets

N 2(*) One-to-One Correspondence

N 3 Number of a Set: to five

N 4 Number Recognition, • to ⁘

N 5(*) Zero

N 6 Number of a set: to 12 (optional)

N 7 Construct Set of Given Number

N 8 Order Sets

N 9 Number: One More, One Less

N 10 Numerals: 1 to 5

N 11 First, Next, Last

N 12(*) Count: to 5

Addition and Subtraction

+ 1(*) Meaning of Addition

+ ˉ2(*) Meaning of Subtraction

Problem Solving

P 1(*) Classify by Attributes

P 2(*) Complete a Pattern

Measurement

M 1(*) Time: to half-hour

M 2(*) Money: Coins

M 3(*) Money: Value of Coins

M 4(*) Length: Compare

M 5(*) Length: Order

M 6(*) Weight: Compare

M 7(*) Weight: Order

M 8(*) Volume: Compare

M 9(*) Volume: Order

M 10(*) Temperature: Compare

M 11(*) Temperature: Order

Geometry

G 1(*) Position and Comparison

G 2(*) Circle and Polygons

● *Prerequisite Objectives for TABS are underlined. Objectives directly tested by TABS are ringed.* ●

MATH FOR EVERYONE

82-F

Name: ______________________ **Teacher:** ______________________

First Grade: Individual Student Record

Teachers highlight objectives which have been mastered.

Number and Numeration	
N 1	Members of Sets
N 2*	One-to-One Correspondence
N 3	Number of a Set: to five
N 4	Number Recognition, • to ⁘
N 5*	Zero
N 6	Number of a Set: to 12
N 7	Construct Set of Given Number
N 8	Order Sets
N 9	Number: One More, One Less
N 10	Numerals: 1 to 5
N 12*	Count: to 5, 12
N 13*	Number Recognition, 0 to 12
N 14*	Numerals and words, 0 to 12
N 15*	Write Numerals: to 12
N 16(*)	Compare Numbers: to 12
N 17	Before, After, Between
N 18(*)	Order Numbers
N 19(*)	Use Ordinal Numbers
N 20*	Group and Count by Tens
N 21(*)	2-Digit Numerals
N 22	Name Fraction Models

Addition and Subtraction	
+ 1*	Meaning of Addition
+ 2*	Meaning of Subtraction
+ 3	Combinations: Same Sum
+ 4(*)	Order Property
+ 5(*)	Identity Element: Zero
+ 6	Related + and - Sentences
+ 7(*)	Building a Ten
+ 8*	Know Addition Facts
+ 9(*)	Grouping Property
+ 10*	Know Subtraction Facts

Problem Solving	
P 1*	Classify by Attributes
P 2*	Complete a Pattern
P 3*	Word Problem ↔ Number Sentence

Geometry	
G 1*	Position and Comparison
G 2(*)	Circle and Polygons
G 3(*)	3-Dimensional Figures

Prerequisite Objectives for TABS are underlined. Objectives directly tested by TABS are ringed.

Measurement	
M 1*	Time: to half-hour
M 2*	Money: Coins
M 3*	Money: Value of Coins
M 4*	Length: Compare
M 5*	Length: Order
M 6*	Weight: Compare
M 7*	Weight: Order
M 8*	Volume: Compare
M 9*	Volume: Order
M 10*	Temperature: Compare
M 11*	Temperature: Order
M 12*	Time: Vocabulary
M 13*	Money: Equivalent Coin Sets
M 14*	Money: Problems
M 15	Length: Nonstandard Units
M 16(*)	Length: To Inch, Yard
M 17	Weight: Nonstandard Units
M 18(*)	Weight: To Pound
M 19	Volume: Nonstandard Units
M 20(*)	Volume: to Cup, Quart
M 21(*)	Time: Use Calendar

MATH FOR EVERYONE

Name: 82-F Teacher: ____________

Second Grade: Individual Student Record

Teachers highlight objectives which have been mastered.

Number and Numeration

N 12*	Counts to 20
N 13*	Number Recognition, 0 to 12
N 15*	Write Numerals: to 20
N 16*	Compare Numbers: to 12, to 100
N 17	Before, After, Between
N 18*	Order Numbers
N 19*	Use Ordinal Numbers
N 20*	Group and Count by Tens
N 21*	2-Digit Numerals
N 22	Name Fraction Models
N 23(*)	3-Digit Numerals
N 24*	Read & Write Numerals to 100
N 25	Count by 2's, 5's, 10's
N 26(*)	Identify, Name, Write Fractions

Prerequisite Objectives for TABS are underlined. Objectives directly tested by TABS are ringed.

Addition and Subtraction

+ 3*	Meaning of Subtraction
+ 4*	Order Property
+ 5*	Identity Element: Zero
+ 6	Related + and - Sentences
+ 7*	Building a Ten
+ 8*	Know Addition Facts
+ 9(*)	Grouping Property
+ 10*	Know Subtraction Facts
+ 11	Supply Missing Addends
+ 12*	+: 2 Digits, No Regrouping
+ 13*	-: 2 Digits, No Regrouping
+ 14(*)	+: 2 Digits, Regrouping
+ 15(*)	-: 2 Digits, Regrouping
+ 16(*)	+: 3 Digits, Regrouping

Problem Solving

P 3*	Word Problem ⟷ Number Sentence
P 4*	Read Picture & Bar Graphs
P 5	Make Picture & Bar Graphs

Measurement

M 1*	Time: to half-hour
M 2*	Money: Coins
M 3*	Money: Value of Coins
M 12*	Time: Vocabulary
M 13*	Money: Equivalent Coin Sets
M 14*	Money: Problems
M 16*	Length: To Inch, Yard, Foot
M 18(*)	Weight: To Pound, Ounce
M 20*	Volume: To Cup, Quart, Pint
M 21*	Time: Use Calendar
M 22	Time: To Five Minutes
M 23	Time: Vocabulary
M 24	Time: Read and Write
M 25*	Money: Problems with Coins
M 26	Length: To Centimeter, Meter
M 27	Weight: To Kilogram
M 28	Volume: To Liter
M 29	Temperature: To 10 Degrees

Geometry

G 2*	Circle and Polygons
G 3*	3-Dimensional Figures

MATH FOR EVERYONE

Name: 82-F Teacher:

Third Grade: Individual Student Record

ɜr and Numeration

N 16*	Compare Numbers: to 100
18*	Order Numbers
23*	3-Digit Numerals
N 24*	Read and Write Numerals to 9999
25	Count by 2's, 5's, 10's
26*	Identify, Name, Write Fractions
N 27*	Write Dollars and Cents
28	>, <, or =
29	Even or Odd
N 31(*)	Tenths and Hundredths

ition and Subtraction

2*	Meaning of Subtraction
+ 4*	Order Property
8*	Know Addition Facts
9*	Grouping Property
+ 10*	Know Subtraction Facts
+ 11	Supply Missing Addends
14*	+: 2 Digits, Regrouping
+ 15*	-: 2 Digits, Regrouping
+ 16*	+: 3 Digits, Regrouping
17(*)	-: 3 Digits, Regrouping
+ 18(*)	Use Money Notation
+ 19(*)	+: 4 Digits, Regrouping

Multiplication and Division

X 1*	Meaning of Multiplication
X 2	Determine x facts
X 3*	x by Zero
X 4*	x by One
X 5	Order Property
X 6(*)	Know x Facts
X 7(*)	Meaning of Division
X 8	x and ÷ : Inverses
X 9	Supply Missing Factor
X 12(*)	1 Digit x Multiple of 10
X 13	1 Digit x 2 Digit, No Regrouping
X 14(*)	1 Digit x 2 Digit, Regrouping
X 15(*)	x by 10, 100, 1000
X 16(*)	x by Multiple of 100
X 17	÷ 2 Digit by 1 Digit, No Remainder
X 18(*)	3 Digit x 1 Digit

Problem Solving

P 4*	Read Picture and Bar Graphs
P 5	Make Picture and Bar Graphs
P 6*	Estimate: for + and -
P 7*	Patterns, Sequences
P 8*	Word Problems: + and -
P 9(*)	Word Problems: x and ÷

Measurement

M 3*	Money: Value of Coins
M 16*	Length: To Inch, Yard, Foot
M 18*	Weight: To Pound, Ounce
M 20*	Volume: To Cup, Pint, Quart, Gallon
M 22	Time: To Five Minutes
M 23	Time: Vocabulary
M 24	Time: Read and Write
M 25*	Money: Problems with Coins
M 26	Length: To Centimeter, Meter
M 29	Temperature: To 10 Degrees
M 30	Money: Equivalent Coin Sets
M 31*	Money: Relative Values
M 32(*)	Money: More? or Change Due?
M 33(*)	Weight: Use Scale Balance
M 34	Temp.: Degrees. Boil, Freeze
M 35	Temp.: To Nearest Degree
M 36*	Appropriate Units of Measure
M 37	Perimeters

Geometry

G 2	Circle and Polygons
G 3*	3-Dimensional Figures

● *Prerequisite Objectives for TABS are underlined. Objectives directly tested by TABS are ringed.*

MATH FOR EVERYONE

82-F

Name: ______________________________ Teacher: ______________________________

FOURTH GRADE: INDIVIDUAL STUDENT RECORD

Teachers highlight objectives that have been mastered.

Number and Numeration

[✓ N 18*]	Order Numbers
N 23*	3-Digit Numerals
N 24*	Read & Write Numerals to 9999
N 26*	Identify, Name, Write Fractions
N 27*	Write Dollars and Cents
N 28	>, <, or =
N 29	Even or Odd
[✓ N 30*]	Read & Write Numerals
[✓ N 31*]	Tenths and Hundredths
N 32	Round Numbers
[✓ N 33(*)]	Equivalent Fractions
N 34(*)	Fractions → Decimals

Addition and Subtraction

+ 8*	Know Addition Facts
+ 9*	Grouping Property
+ 10*	Know Subtraction Facts
+ 17*	−: 3 Digits, Regrouping
+ 18*	Use Money Notation
+ 19*	+: 4 Digits, Regrouping
[✓ + 20*]	−: 4 Digits, Regrouping
[✓ + 21*]	+: Rewriting Vertically
+ 22*	−: Rewriting Vertically
+ 23*	+ or −: Decimals

Multiplication and Division

X 1*	Meaning of Multiplication
X 2	Determine x Facts
X 3*	x by Zero
X 4*	x by One
X 5	Order Property
X 6*	Know x Facts
X 7*	Meaning of Division

Multiplication and Division, Cont.

X 10	÷ by 0: Not Possible
X 11	Grouping Property
X 12*	1 Digit x Multiple of 10
X 14*	1 Digit x 2 Digit, Regrouping
X 15*	x by 10, 100, or 1000
X 16*	x by Multiple of 100
X 18*	3 Digit x 1 Digit
X 19*	2 Digit x 2 Digit
X 20*	÷ 3 Digit by 1 Digit, No r.
[✓ X 21*]	3 Digit x 2 Digit
X 22(*)	÷ 3 Digit by 1 Digit, with r.
[✓ X 23*]	÷ 4 Digit by 1 Digit, with r.
X 24	x by Multiple of a Power of 10
X 25	÷ Multiples of 10

Problem Solving

[✓ P 4*]	Read Picture & Bar Graphs
P 6*	Estimate: for + and −
P 7*	Patterns, Sequences
P 8*	Word Problems: + and −
[✓ P 9*]	Word Problems: x and ÷
P 10*	Use Map
P 11*	Use Chart or Table
[✓ P 12(*)]	Read Line Graphs
P 13	Construct Graphs
P 14	Estimate: for x
[✓ P 15(*)]	Word Problems: +, −, x, ÷
P 16	Problems with Measures
P 17	Problems: Extraneous Data
P 18	Problems: Missing Facts
P 19	Averages

Measurement

M 16*	Length: To Inch, Yard, Foot
M 18*	Weight: To Pound Ounce
M 20*	Volume: To Cup, Quart, Pint, Gal.
M 22	Time: To Five Minutes
M 24	Time: Read and Write
M 26	Length: To Centimeter, Meter
M 30	Money: Equivalent Coin Sets
M 31*	Money: Relative Values
[✓ M 32*]	Money: More? or Change Due?
M 33*	Weight: Use Scale Balance
M 34	Temp.: Degrees, Boil, Freeze
M 35	Temp.: To Nearest Degree
[✓ M 36*]	Appropriate Units of Measure
M 37	Perimeters
M 38*	Time: To Nearest Minute
M 39	Units of Metric Measure
M 40	Volume: To Liter, Milliliter
M 41	Area

Geometry

[✓ G 2*]	Circle and Polygons
[✓ G 3*]	3-Dimensional Figures
G 4	Point, Line, Ray, Angle
G 5	Lines

Prerequisite objectives for TABS are underlined.

82-F

MATH FOR EVERYONE

Name: ______________________________ Teacher: ______________________________

FIFTH GRADE: INDIVIDUAL STUDENT RECORD

Teachers highlight objectives that have been mastered.

Number and Numeration

N 18*	Order Numbers
N 28	>, <, or =
N 30*	Read & Write Numerals
N 31*	Tenths and Hundredths
N 32	Round Numbers
N 33*	Equivalent Fractions
N 34(*)	Fractions → Decimals
N 35*	>, <, or =: Decimals
N 36(*)	Fractions on Number Line
N 37*	>, <, or =: Fractions
N 38(*)	Fractions in Lowest Terms
N 39(*)	Mixed Numeral ⟷ Fraction
N 40	Fraction as Division

Addition and Subtraction

+ 8*	Know Addition Facts
+ 10*	Know Subtraction Facts
+ 20*	–: 4 Digits, Regrouping
+ 21*	+: Rewriting Vertically
+ 22*	–: Rewriting Vertically
+ 23*	+ or –: Decimals
+ 24(*)	+ or –: Fractions

Multiplication and Division

X 6*	Know x Facts
X 9	Supply Missing Factors
X 10	÷ by 0: Not Possible
X 12*	1 Digit x Multiple of 10
X 14*	1 Digit x 2 Digit, Regrouping
X 15*	x by 10, 100, or 1000
X 16*	x by Multiple of 100
X 18*	3 Digit x 1 Digit

Multiplication and Division cont.

X 20*	÷ 3 Digit by 1 Digit, No r.
X 21*	3 Digit x 2 Digit
X 22*	÷ 3 Digit by 1 Digit, with r.
X 23*	÷ 4 Digit by 1 Digit, with r.
X 24	x by Multiple of a Power of 10
X 25	÷ Multiples of 10
X 26	3 Digit x 3 Digit
X 27	x: up to 4 Digits
X 28*	x: Money
X 29*	÷: Money
X 30	÷ 4 Digit by 2 Digit
X 31	x: Fractions, Model
X 32	x: Fractions
X 33	x: Fraction and Whole Number
X 34	x: Mixed Numbers
X 38*	x: Decimal in One Factor

Problem Solving

P 4*	Read Picture & Bar Graphs
P 6*	Estimate: for + and -
P 10*	Use Map
P 11*	Use Chart or Table
P 12*	Read Line & Circle Graphs
P 13	Construct Gr[illegible]s
P 14	Estimate: for x
P 15*	Word Problems: +, -, x, ÷
P 16	Problems with Measures
P 17	Problems: Extraneous Data
P 18	Problems: Missing Facts
P 19	Averages
P 20	Estimate: for ÷
P 21	Classify; Order; Form Sets
P 22	Problems: 2 Operations
P 23	Types of Graphs

Measurement

M 16*	Length: To Inch, Yard, Foot
M 20*	Volume: To Cup, Quart, Pint, Gal.
M 26	Length: To Centimeter, Meter
M 32*	Money: More? or Change Due?
M 33*	Weight: Use Scale Balance
M 36*	Appropriate Units of Measure
M 37	Perimeters
M 39	Units of Metric Measure
M 40	Volume: To Liter, Milliliter
M 41	Area
M 42*	Length: To Half-Inch
M 43*	Volume: Teaspoon, Tablespoon
M 44	Circumference
M 45	Cubic Volume
M 46	Angles

Geometry

G 2*	Circle and Polygons
G 3*	3-Dimensional Figures
G 4	Point, Line, Ray, Angle
G 6*	Quadrilaterals
G 7	Parts of a Circle
G 8	Kinds of Angles
G 9	Kinds of Triangles
G 10	Construct Congruent Line Segments
G 11	Construct Angle, Given Degrees
G 12	Construct Circle, Given Radius

Prerequisite objectives for TABS are underlined. Objectives directly tested by TABS are ringed.

MATH FOR EVERYONE

82-F

Name: ____________________ Teacher: ____________________

SIXTH GRADE: INDIVIDUAL STUDENT RECORD

Teachers highlight objectives that have been mastered.

Number and Numeration

N 28	>, <, or =
N 30*	Read & Write Numerals
N 31*	Tenths and Hundredths
N 32	Round Numbers
N 33*	Equivalent Fractions
N 34*	Fractions → Decimals
N 35*	>, <, or=: Decimals
N 36*	Fractions on Number Line
N 37*	>, <, or =: Fractions
N 38*	Fractions in Lowest Terms
N 39*	Mixed Numeral ↔ Fraction
N 40	Fraction as Division
N 41	Round Decimals
N 42	Decimals → Fractions
N 43*	Per Cent
N 44	Least Common Multiple
N 45	Prime or Composite
N 46	Factors
N 47	Prime Factors
N 48	Greatest Common Factor
N 49	Roman Numerals
N 50	Integers
N 51	Order Integers

Addition and Subtraction

+ 21*	+: Rewriting Vertically
+ 22*	-: Rewriting Vertically
+ 23*	+ or -: Decimals
+ 24*	+ or -: Fractions
+ 25	+ or -: Unlike Denominators

Multiplication and Division

X 6*	Know x Facts
X 9	Supply Missing Factor
X 10	÷ by 0: Not Feasible
X 20*	÷ 3 Digit by 1 Digit, No r.
X 22*	÷ 3 Digit by 1 Digit, with r.
X 23*	÷ 4 Digit by 1 Digit, with r.
X 25	÷ Multiples of 10
X 26	3 Digit x 3 Digit
X 27	x: up to 4 Digits
X 28*	x: Money
X 29*	÷: Money
X 30	÷ 4 Digit by 2 Digit
X 32	x: Fractions
X 33	x: Fraction & Whole Number
X 34	x: Mixed Numbers
X 35	÷: Fractions, Model
X 36	÷: Fraction & Whole Number
X 37	÷: Fractions
X 38*	x: Decimal in One Factor
X 39*	x: Decimal in Both Factors
X 40	÷: Decimal by Whole Number
X 41	÷: Decimal by Decimal

Problem Solving

P 4*	Read Picture & Bar Graphs
P 10*	Use Map
P 11*	Use Chart or Table
P 12*	Read Line & Circle Graphs
P 13	Construct Graphs
P 15*	Word Problems: +, -, x, ÷
P 17	Problems: Extraneous Data
P 18	Problems: Missing Facts
P 19	Averages
P 20	Estimate: for ÷

Problem Solving Cont.

P 22	Problems: 2 Operations
P 23	Types of Graphs
P 24	Graphs: Interpret
P 25	Graph Open Sentences
P 26	Graph Ordered Pairs
P 27	Solve Equations
P 28	Ratios
P 29	Gather & Graph Statistics

Measurement

M 20*	Volume: To Cup, Quart, Pint, Gal.
M 26	Length: To Centimeter, Meter
M 32*	Money: More? or Change Due?
M 33*	Weight: Use Scale Balance
M 39	Units of Metric Measure
M 42*	Length: To Half-Inch
M 43*	Volume: Teaspoon, Tablespoon
M 44	Circumference
M 45	Cubic Volume
M 46	Angles
M 47	Length: Line Segments
M 48	Area Using Formulas
M 49	Circumference Using Formula

Geometry

G 3*	3-Dimensional Figures
G 4*	Quadrilaterals
G 7	Parts of a Circle
G 8	Kinds of Angles
G 9	Kinds of Triangles
G 10	Construct Congruent Line Segments
G 12	Construct Circle, Given Radius
G 13	Construct Congruent Angles
G 14	Bisect: Angle or Segment
G 15	Construct Perpendicular Lines

82-F

AUSTIN INDEPENDENT SCHOOL DISTRICT
Division of Instruction
Department of Elementary Education

Attachment E-4
(Page 1 of 4)

CHICAGO MASTERY LEARNING READING

SKILL UNITS TO BE TAUGHT

GRADE 1 - LEVEL 1 - RED

Word Attack/Study Skills

Required Units:

Unit 2 Sight Words I
Unit 4 Sight Words II
Unit 7 Sight Words III
Unit 9 Sight Words IV
Unit 8 Compound Words

Optional Unit:

Unit 4 Titles

Comprehension

Required Units:

Unit 5 How and Why Questions
Unit 6 Context Clues I
Unit 7 Context Clues II - Synonyms/Antonyms
Unit 8 Words That Describe

GRADE 2 - LEVEL 2 - GREEN

Comprehension

Required Units:

Unit 3 Imagery in Reading
Unit 4 Cause and Effect
Unit 10 Inference I
Unit 12 Inference II
Unit 6 Categorizing

Optional Unit:

Unit 7 Sentence Meaning

GRADE 3 - LEVEL 2 - GREEN

Comprehension

Required Units:

Unit 2 Sentences in Sequence
Unit 4 Cause and Effect
Unit 5 Using Context Clues
Unit 6 Categorizing
Unit 7 Sentence Meaning

Optional Units:

Inference I
Titles/Main Idea

GRADE 4 - LEVEL 3 - ORANGE

Comprehension

Required Units:

Unit 1 Categorizing (Quickie)
Unit 2 Comparisons I
Unit 4 Comparisons II
Unit 5 Picking Best Answer
Unit 8 Cause and Effect
Unit 9 Fact and Opinion

Optional Units:

Unit 3 Making Sense
Unit 10 Finding the Right Answer

GRADE 5 - LEVEL 4 - BLUE

Comprehension

Required Units:

Unit 1 Contant and Message
(Independent Activity)
Unit 6 Sequence and Patterns
Unit 8 Topic Sentences
Unit 9 Making Inferences I
Unit 12 Problem Solving
Unit 13 Fact and Opinion

Optional Units:

Unit 10 Globes
Unit 2 Charts

GRADE 6 - LEVEL 4 - BLUE

Comprehension

Required Units:

Unit 1 Content and Message
(Independent Activit
Unit 7 Stereotypes
Unit 8 Topic Sentences
Unit 11 Inferences II
Unit 12 Problem Solving
Unit 13 Fact and Opinion

Optional Units:

Unit 10 Globes
Unit 4 Graphs

Schedule

First Grade

Morning Session I		Morning Session II
8:30 - 8:35	Attendance	10:00 - 11:05
8:35 - 8:40	Read to Children	11:05 - 11:10
8:40 - 9:10	CLMR - Word Study	11:10 - 11:40
9:10 - 9:30	CLMR - Comprehension	11:40 - 12:00
9:30 - 10:00	Practice/Application	12:00 - 12:30

Language Experience Activities

Journal Writing

Triple-R-Time

Scholastic "Text Extenders"

Modern Curriculum Press Books

RIF Books

Library Books

Schedule

Second Grade

Morning Session I		Morning Session II
8:30 - 8:35	Attendance	11:00 - 11:05
8:35 - 8:40	Read to Children	11:05 - 11:10
8:40 - 9:10	CLMR - Comprehension	11:10 - 11:40
9:10 - 9:30	CLMR - Word Study	11:40 - 12:00
9:30 - 10:00	Practice/Application	12:00 - 12:30

Language Experience Activities
Journal Writing
Triple-R-Time
Scholastic "Text Extenders"
Houghton-Mifflin "Mini-Books"
RIF Books
Library Books

Schedule

Third-Sixth Grades

Morning Session I		Morning Session II
8:30 - 8:35	Attendance	11:00 - 11:05
8:35 - 8:40	Read to Children	11:05 - 11:10
8:40 - 9:15	CLMR - Comprehension	11:10 - 11:40
9:15 - 10:00	Special Instruction Groups Practice/Application	11:40 - 12:30

Language Experience Activities

Journal Writing

Triple-R-Time

Scholastic "Text Extenders"

Houghton-Mifflin "Mini-Books"

Dell "Bringing Children and Books Together"

Library Books

RIF Books

Attachment E-5

Math Follow-up

82-F

Math Control Group

July 8, 1982

Dear Summer School Math Teacher:

As part of the research design for the Elementary Summer School Program this year, you will recall that various approaches to follow-up activities were to be tried for the remaining weeks of the summer prior to the beginning of school in both math and reading.

Your class has been randomly selected to be part of the math control group, receiving the general math follow-up treatment. That is, the only follow-up activity will be the letter (See Attachment A). Please assist us with this crucial aspect of the program by distributing them with the workbooks to the students on Friday, July 9.

In addition, please attach a copy of the other letter (Attachment B) to the receiving teacher's copy of each child's summer school report card. This will be forwarded on the child's fall teacher before school starts to give that individual an idea of that student's progress during the Elementary Summer School Program.

If you have any questions concerning the structured follow-up activities, please feel free to direct them to Joan Burnham of Applications and Compliance (458-1291) or Nancy Baenen of ORE (458-1227). They are assisting us with this aspect of the program while we and other Elementary Instructional Coordinators are off-contract until August 2.

Please know how much we all appreciate your dedicated efforts this summer. We hope that you have had a good teaching experience and have a restful remaining vacation!

The Math
Summer School Committee

82-F

July 9, 1982

Dear Summer School Parent:

We have enjoyed having your child in the summer school program. We hope that it has been a good experience for you and your child as well.

In the summer math instruction, it was not possible to complete all of the math workbook in the short five-week period. For that reason, we are asking that you take some time with your child to complete some pages in the workbook that were not assigned during the summer school. This will help him (her) to continue to improve in his (her) math skills and to retain math skills during the summer months.

Below on this letter you will find a list of recommended activities to complete during the remaining weeks of the summer. Since the teacher will not be there--as during the summer school--to explain the activities, please work with your child on the problems. You will find it helpful for him (her) to work at least the first 3 or 4 problems under each section (A, B, C, etc.) with you aloud.

It is also a good idea to set aside a quiet place in the house where your child can work on math activities. You will find that your child will work better if he(she) works each day for a limited time period (such as 30 minutes daily). Math demands a great deal of concentration, and can therefore be very tiring for a child to continue to work at it for long periods of time.

We wish you and your child a remaining pleasant summer. We look forward to having your child as one of our students this fall.

Sincerely,

The Elementary Instructional
Program, AISD

Grade 1

(Week)	(Topic)	(Pages)
Week of July 16	Addition	76, 82, 86, 91, 127
Week of July 23	Subtraction	94, 99, 117, 125, 128
Week of July 30	Time and Money	156,157,171,172,173,174,175,177,179
Week of August 6		
Week of August 13	Fractions	63, 64, 65, 66, 67

July 9, 1982

Dear Summer School Parent:

We have enjoyed having your child in the summer school program. We hope that it has been a good experience for you and your child as well.

In the summer math instruction, it was not possible to complete all of the math workbook in the short five-week period. For that reason, we are asking that you take some time with your child to complete some pages in the workbook that were not assigned during the summer school. This will help him (her) to continue to improve in his (her) math skills and to retain math skills during the summer months.

Below on this letter you will find a list of recommended activities to complete during the remaining weeks of the summer. Since the teacher will not be there--as during the summer school--to explain the activities, please work with your child on the problems. You will find it helpful for him (her) to work at least the first 3 or 4 problems under each section (A, B, C, etc.) with you aloud.

It is also a good idea to set aside a quiet place in the house where your child can work on math activities. You will find that your child will work better if he(she) works each day for a limited time period (such as 30 minutes daily). Math demands a great deal of concentration, and can therefore be very tiring for a child to continue to work at it for long periods of time.

We wish you and your child a remaining pleasant summer. We look forward to having your child as one of our students this fall.

Sincerely,

The Elementary Instructional
Program, AISD

Grade 2

(Week)	(Topic)	(Pages)
Week of July 16	Addition	125, 127, 144, 149, 154
Week of July 23	Subtraction	126, 128, 150, 152, 155
Week of July 30	Time	83, 84, 85, 181, 182,183, 184
Week of August 6	Money	86.87,88,89,91,197,198,199,200,201
Week of August 13	Fractions	94,103,104,111, Set A on p.114-115

82-F

July 9, 1982

Dear Summer School Parent:

We have enjoyed having your child in the summer school program. We hope that it has been a good experience for you and your child as well.

In the summer math instruction, it was not possible to complete all of the math workbook in the short five-week period. For that reason, we are asking that you take some time with your child to complete some pages in the workbook that were not assigned during the summer school. This will help him (her) to continue to improve in his (her) math skills and to retain math skills during the summer months.

Below on this letter you will find a list of recommended activities to complete during the remaining weeks of the summer. Since the teacher will not be there--as during the summer school--to explain the activities, please work with your child on the problems. You will find it helpful for him (her) to work at least the first 3 or 4 problems under each section (A, B, C, etc.) with you aloud.

It is also a good idea to set aside a quiet place in the house where your child can work on math activities. You will find that your child will work better if he(she) works each day for a limited time period (such as 30 minutes daily). Math demands a great deal of concentration, and can therefore be very tiring for a child to continue to work at it for long periods of time.

We wish you and your child a remaining pleasant summer. We look forward to having your child as one of our students this fall.

Sincerely,

The Elementary Instructional
Program, AISD

Grade 3

(Week)	(Topic)	(Pages)
Week of July 16	Addition and Subtraction	43, 45, 53, 74, 85
Week of July 23	Multiplication	148,149, 151,152,250,251
Week of July 30	Time and Money	51,59,65,77,87,170,172,173,174
Week of August 6	Fractions	158,159,160,161,178
Week of August 13	Geometry	93, 100, 103, 104, 109

82-F

July 9, 1982

Dear Summer School Parent:

We have enjoyed having your child in the summer school program. We hope that it has been a good experience for you and your child as well.

In the summer math instruction, it was not possible to complete all of the math workbook in the short five-week period. For that reason, we are asking that you take some time with your child to complete some pages in the workbook that were not assigned during the summer school. This will help him (her) to continue to improve in his (her) math skills and to retain math skills during the summer months.

Below on this letter you will find a list of recommended activities to complete during the remaining weeks of the summer. Since the teacher will not be there--as during the summer school--to explain the activities, please work with your child on the problems. You will find it helpful for him (her) to work at least the first 3 or 4 problems under each section (A, B, C, etc.) with you alaud.

It is also a good idea to set aside a quiet place in the house where your child can work on math activities. You will find that your child will work better if he(she) works each day for a limited time period (such as 30 minutes daily). Math demands a great deal of concentration, and can therefore be very tiring for a child to continue to work at it for long periods of time.

We wish you and your child a remaining pleasant summer. We look forward to having your child as one of our students this fall.

Sincerely,

The Elementary Instructional
Program, AISD

Grades 4, 5, & 6

(Week)	(Topic)	(Pages)
Week of July 16	Addition and Subtraction	163-169, 171
Week of July 23	Multiplication	196,197,201,203,206
Week of July 30	Division	207,208,209,210,222
Week of August 6	Fractions	139-145, 253
Week of August 13	Measurement	130,241

82-F

Math Experimental
Group

July 8, 1982

Dear Summer School Math Teacher:

As part of the research design for the Elementary Summer School Program this year, you will recall that various approaches to follow-up activities were to be tried for the remaining weeks of the summer prior to the beginning of school in both math and reading.

Your class has been randomly selected to receive the experimental math follow-up treatment. That is, in addition to this letter sent home with each child the last day of summer school, each child and parent will be sent a reminder letter through the mail with more specific instructions for completing the suggested math activities during that week. Please distribute copies of those initial letters,(Attachment A), along with the workbooks, to your students this Friday, July 8.

In addition, please attach a copy of the other letter (Attachment B) to the receiving teacher's copy of each child's summer school report card. This will be forwarded on the child's fall teacher before school starts to give that individual an idea of that student's progress during the Elementary Summer School Program.

If you have any questions concerning the structured follow-up activities, please feel free to direct them to Joan Burnham of Applications and Compliance (458-1291) or Nancy Baenen of ORE (458-1227). They are assisting us with this aspect of the program while we and other Elementary Instructional Coordinators are off-contract until August 2.

Please know how much we all appreciate your dedicated efforts this summer. We hope that you have had a good teaching experience and have a restful remaining vacation!

The Math
Summer School Committee

AUSTIN INDEPENDENT SCHOOL DISTRICT

July 16, 1982

Dear Summer School Parent:

You will recall that the last day of your summer school program on Friday, July 9, we sent a letter home to you with your Child, along with a math workbook. At that time we stated in the letter that in addition to the suggested assignments listed in that letter, we would be sending you a reminder note each week for the five-week period. Each of those letters will give specific instructions for completing the suggested math activities in case you have any questions concerning the directions for each activity. Hopefully, this will take the place of the teacher-directions that would have been give to your child in school, with the assignments.

If you can, we think it will help your child with math in the fall if he/she can work a these recommended math activities. All of the skills presented are important, but ther was simply not enough time within the five-week school period to finish the complete workbook.

Below are the suggested assignments for this week. Again, please be sure that your chil does not try to do them all at once. Working regularly for a period of time a day (such as 30 minutes) is usually the most productive. We will be sending the remaining four letters over the next month.

Sincerely,

The Elementary Math Instructional Program, AISD

ADDITION/SUBTRACTION

p.43 Complete the cross-number puzzle by writing the correct numbers in the boxes.

p. 45 For Set A, write the correct answers for the addition problems. For set B, do the subtraction problems. For set C, solve the word problems that use addition or subtraction to find the answers.

p. 53 Solve the problems in sets A and B; each domino with 2 sets of numbers can help you understand the problem. (for example: in problem 1, there are 24 green dots and 33 orange dots, totalling 57 dots.

p. 74 As on p. 74, solve the addition and subtraction problems that the domino helps to explain.

p. 85 Dot the subtraction problems, using renaming of tens as ones. The yellow box gives you a sample of how to do them.

82-F

July 23, 1982 (3)

Dear Parent of Summer School Math Student:

This week please spend some time helping your child to complete the pages below in his/her math workbook. Instructions for your child are included in the boxes for each page.

Your child's classroom teacher for next year is aware that your child may be completing some math activities at home. We know he/she will be interested in seeing any that your child might complete.

The Elementary Instructional Program, AISD

MULTIPLICATION

p. 148 Solve these problems, using multiplication. The picture of the theater tickets in (1) helps to explain the operation.

p. 149 For set B, use the domino to help you solve these multiplication problems.

p. 151 To find the answer to these problems, use the rule method. For example, for problem (1), it would be solved this way

$$\begin{array}{r} 55 \\ \underline{\times\ 4} \\ 20 \\ \underline{200} \\ 220 \end{array}$$

p. 152 One way of checking to see if you have a right answer is to use addition. For instance, 42 x 3 = 126. In order to check it, we could add 42 + 42 + 42, which would also be 126. Since the answers are the same, we would know that we solved the problem correctly. Work all of the problems on the page that way, checking by addition.

p. 250, 251 Do only A and B on this page. Practice your multiplication tables and solve these problems.

July 23, 1982 (4)

82-F

Dear Parent of Summer School Math Student:

This week please spend some time helping your child to complete the pages below in his/her math workbook. Instructions for your child are included in the boxes for each page.

Your child's classroom teacher for next year is aware that your child may be completing some math activities at home. We know he/she will be interested in seeing any that your child might complete.

The Elementary Instructional Program, AISD

MULTIPLICATION

p. 196 Discuss the example in the blue box. Ask your parent to go over the questions in exercise B with you. Then go on to complete the rest of the problems. Remember that in each problem you are multiplying the bottom number, such as "3" in the blue box example, first by the ones, then by the tens and then by the hundreds place of the top number, (Look at 123 in the same example).

p. 197 Go over this short method of multiplying with your parent by discussing first the example in the blue box. Then work the exercises in set A together. Now see if you can complete sets B and C by yourself.

p. 201 Do the first problem orally with your parent. Then continue to use multiplication to solve the rest of the problems. Remember you can use repeated addition to check to see if your answer is correct. (For instance 2 x 3 = 6 or 2 + 2 + 2 = 6 (repeated addition).

p. 203 Do the multiplication problems on this page, using the short method discussed on p. 197

p. 206 Review your multiplication skills by completing the exercises on this page.

July 23, 1982 (5)

Dear Parent of Summer School Math Student:

This week please spend some time helping your child to complete the pages below in his/her math workbook. Instructions for your child are included in the boxes for each page.

Your child's classroom teacher for next year is aware that your child may be completing some math activities at home. We know he/she will be interested in seeing any that your child might complete.

The Elementary Instructional Program, AISD

MULTIPLICATION/DIVISION

pp. 305
306

Complete these three pages of review of multiplication skills. Remember some of the exercises are to be done in your head and others on paper.

pp. 307-
309

Complete these pages that review your division facts and skills. Notice that some can be done in your head while others need to be worked out in problem form (po. 308-309). For the last two pages, find the quotients (answers) and the remainders for the problems included.

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

TIME AND MONEY

p. 51

For problems in the blue box in set B, fill in the correct answers. You will remember that the expanded name for 2 tens is 20. For the first problem, then, the expanded name would be 20 + 4. The standard name would be 24 (the sum of these two figures). For set C, you will be using addition to complete the problem. For instance, you will add the two sets of items together in the line to get the answer, 27¢.

pp. 65, 77

(1) on page 65, for C, write the correct time below the clock. For instance, for problem (1), the time is 1:30.
(2) on page 77, you will be renaming tens as ones. For instance, in problem (1), under set A, 2 dimes, 2 pennies = 1 dime, 12 pennies. The picture of the coins helps to see what renaming the tens as ones looks like.

pp. 87, 170

For set B, write the correct time that the clock says under it. For instance for (1), the time would be 12:17. For set C, you will have to use subtraction to help you. For instance, in problem (1) the clock says 7:46. Ten minutes before would be 7 hours and 46 minutes minus 10 minutes, or 7:36.

pp. 172, 173

Look at the information in the yellow box on the top of the page. It shows you three different ways to add 53¢ and 26¢. Using one of those ways for each problem, solve the problems in Sets A and B.

p. 174

For C, D, and E, you will get the right answer if you add the two numbers together and keep the decimal point in the same place as it is on the two numbers of pennies added together. For instance, for the first problem in C, $.18
.07
$.25, the answer is $.25 or 25¢.

July 30, 1982 (4)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

DIVISION

p. 207	Discuss the examples for finding the quotient (answer) for the problem 18 ÷ 6 = 3 in the blue box. In using Bob's method, remember to skip the number of spaces backward from 18 that the divider (6) says. The number of skips (3) necessary to get to 0 will be your answer.
p. 208	For set B, divide all the numbers in each row by the first number. For instance, all numbers in problem 1 will be divided by 7. Put the correct answer above the number in the blank space.
p. 210	Discuss the 1-2 exercises in set A with your parent. Now go on and do problems 3 and 4 of set A. Then complete the table on set B. You may want to draw dots, pictures as in set A to help you find the answer.
p. 222 (1-3, 5-6)	Discuss problems 1 and 4 with your parent. In problem 4, you will want to find out how many shelves will be filled by dividing the number of books (6s) by the number per shelf(s).

July 30, 1982 (5)

82-F

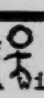
Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

GRAPHS

p. 237 Discuss the picture graph with your parent. Remember that if  = 2 presidents, = 1 president. Work the problems or set A with your parent.

p. 238 Continue to complete set B, using the picture graph at the top of the page. Again, work with your parent in completing this exercise.

p. 239 Discuss the bar graph with your parent. Then complete set A with your parent's guidance.

p. 245 Review graphs by completing this page. Remember that a key is below the graph (for instance, D = 5 inches of rainfall)

p. 246 Now continue to use your graph skills by answering the questions on this page.

August 6, 1982 (3)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

FRACTIONS

p. 158 For set B put an X on those pictures that are made up of two halves (such as the circle in (1)). It shows us ½ because it is made up of two equal parts. Each half is ½ of the whol circle. Remember that unless a picture is made up of two equal parts, one part is not ½ of the whole picture. For D, the answers are similar, but are talking about a picture divided into three equal parts.

p. 159 Use the information you learned on p. 158 to answer the questions. Remember that numerals such as ½, $\frac{1}{3}$, and ¼ are fractions. Write the correct fraction for the part of the picture that is shaded in set H.

p. 160 Do the problems on page 160 as you did the problems on page 159. This time, though, you will be working with the fractions $\frac{1}{6}$ or one equal part of a picture made up of 6 equal parts), and the fraction $\frac{1}{8}$ or one equal part of a picture made up of 8 equal parts).

p. 161 For sets B and C, you will find the correct fraction by writing the number of shaded parts over the total number of parts in each picture. For instance in picture (1) in B, there are 3 equal parts and 4 total equal parts, or $\frac{3}{4}$.

p. 178 Use all the information you have learned for this week in completing the review page on p. 178. You may find it helpful to look back to the earlier pages you completed this week to remind you of certain important things.

August 6, 1982 (4)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

FRACTIONS

139, 140 — Go over sets A through Eout loud with your parent: Then complete exercise F by writing the correct fraction on the dotted line. For example since 2 parts of the 4 equal parts are shaded in exercise 1., your answer would be $\frac{2}{4}$.

141, 142 — Go over the practice exercise at the top of the page with your parent. Keep in mind the definitions for numerator and denominator as you work the problems on these 2 pages.

143, 144 — Do exercise A orally with your parent. Review the meaning of numerator and denominator in this exercise. Now go on to work the problems on both pages.

p. 145 — Discuss the sample problem at the top of the page. Remember if the whole picture is shaded, the fraction is $\frac{2}{2}$, $\frac{3}{3}$, $\frac{4}{4}$, $\frac{5}{5}$ or $\frac{6}{6}$, etc., depending on how many eqaul parts make it up. Then complete the page on you own.

p. 253 — Discuss exercise A with your parent and work the problems orally. Now go on to complete the page. Remember that the top number of a fraction, such as 2 in $\frac{2}{4}$, stands for the number of shaded parts (numerator), and the bottom number 4 stands for the total number of parts (denominator).

August 6, 1982 (5)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

GEOMETRY/MEASUREMENT

p. 84	Draw a line from a ray to the flashlight (the ray is the second figure on the left.) Notice how the flashlight represents a ray. Now draw a line from each line or shape to an object on the right side of the page that represents it.
p. 101	Using the information in the blue box, answer the questions in set A. Now look at the information in the middle of the page, use it to answer questions in set B.
p. 102	Study the information at the top of the page. Now use it to answer questions in sets C and D. You may need help from your parent to complete this page.
p. 103	This page continues the process used on p. 102 to change from one unit to another. Using the new units of weight discussed here, ounces, pounds, complete the problems in sets A, B, and C.

August 13, 1982 (3)

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
    Program, AISD

GEOMETRY

p. 93

Follow the directions on this page for comparing lengths for sets B, C, and D. For set A, look back to the yellow box at the top of p. 92 to remind you of what a curve looks like.

p. 100

Read the information in the yellow box at the top half of the page carefully. You should be able to answer the questions below in sets, A, B, and C.

p. 103

In set B, (2) and (3), remember how to write one-half as ½. C, turn back to page 98 to help you remember how long a centimeter is.

p. 104

If you study carefully the information in the yellow box at the top of the page which gives definitations for units of measure, you should be able to answer the questions on this page.

p. 105
109

For set A, remember that means "greater than", and means "less than". For set B, remember that you must add the answer to the bottom number you are subtracting in order to check for the right answer by using addition. For instance, in problem one,

$$\begin{array}{r} 79 \\ -43 \\ \hline 36 \\ \hline 79 \end{array}$$

36 - answer

79 - addition check
(same as number from which you are subtracting)

August 13, 1982 (4)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

MEASUREMENT

p. 130 Do exercise C orally with your parents. Remember that this picture of a yardstick is much smaller than a real yardstick would be. Then complete the page independently.

p. 241 Discuss the picture of gallons, pints, and quarts, with your parent. Make sure you understand how these measurements are related to one another, such as, 1 gallon = 4 quarts, or 1 quart = 2 pints. Then finish the rest of the page.

August 13, 1982 (5)

82-F

Dear Summer School Math Student:

This week please spend some time completing the pages below in your math workbook. Instructions are included in the boxes for each page.

Have a good week!

The Elementary Instructional
Program, AISD

FRACTIONS

p. 109 In each of the problems in exercise A, fractions can be made when talking about parts of a whole. For instance, in 1 there are 8 cubes left out of 10 cubes, or $\frac{8}{10}$ of them are left. Complete the problems in exercise a orally with parent, then go over exercise B as well, circling the fraction.

p. 110 On p. 110 we find that a fraction can be talking about part of a set as well as an equla part of a whole made up of equal parts. For instance, the set of objects in the blue bqx are of unequal size but the 5 shaded objects of the six total number is $\frac{5}{6}$ of the set. Contract this kind of fractional number with the $\frac{5}{6}$ of the single region below it, 5 equal pieces of a single object made up of 6 pieces. Then complete exercise C

p. 111 In writing fractions, the top number is always the numerator, the bottom always the denominator. Complete exercise A as directed.

p. 119 Complete the review exercises on fractions on this page. If you have trouble with any of these, ask your parent for some help.

p. 120 Each fraction can be written as a fraction number (such as $\frac{2}{3}$ or as a word name, two-thirds. Complete the exercises on this page, which all refer to fractions in both ways.

Attachment E-6

Reading Follow-up

82-F

Reading Control
Group

July 8, 1982

Dear Summer School Reading Teacher:

As part of the research design for the Elementary Summer School Program this year, you will recall that various approaches to follow-up activities were to be tried for the remaining weeks of the summer prior to the beginning of school in both math and reading.

Your class has been randomly selected to receive the control reading follow-up treatment. That is, the only follow-up activity will be one letter (Attachment A). Please assist us with this crucial aspect of the program by distributing them to each of your students the last day of school, Friday, July 9.

If you have any questions concerning the structured follow-up activities, please feel free to direct them to Joan Burnham of Applications and Compliance (458-1291) or Nancy Baenen of ORE (458-1227). They are assisting us with this aspect of the program while we and other Elementary Instructional Coordinators are off-contract until August 2.

Please know how much we all appreciate your dedicated efforts this summer. We hope that you have had a good teaching experience and have a restful remaining vacation!

The Language Arts Summer School Committee

July 9, 1982

Dear Summer School Parent:

As you know, your child has had many opportunities during the summer program to take books out of the school library and to read books of interest. Since we know from research that one of the best ways for a child's reading to improve is to read more books. we urge you to encourage your child to do so.

Please take advantage of these leisurely remaining weeks of summer when your child is not in school to take him (her) to the Austin Public Library to take out more books. Summer reading can be lots of fun for your child, opening up new "worlds" of ideas and exciting experiences.

Keep in mind, too, that listening to your child read aloud for 15 minutes per day and discussing the story afterwards together is equally as valuable as the independent silent reading times. These can be some pleasurable moments for both of you, sharing some ideas and feelings together about the book.

Your help in improving your child's reading skills is both needed and appreciated!

The Elementary Instructional
Program, AISD

July 8, 1982

Dear Summer School Reading Teacher:

As part of the research design for the Elementary Summer School Program this year, you will recall that various approaches to follow-up activities were to be tried for the remaining weeks of the summer prior to the beginning of school in both math and reading.

Your class has been randomly selected to receive the experimental reading follow-up treatment. That is, in addition to letter (Attachment A) urging parents to continued reading activities with their children, each week every parent and child in your class will be sent (via the mail) a follow-up activity to complete. They will be sent over a five-week period. (A set of those activities is included for you information). Please assist us with this crucial aspect of the program by distributing these attached letters to all of your students the last day of school, Friday, July 9.

In addition, please attach a copy of the other letter (Attachment B) to the receiving teacher's copy of each child's summer school report card. This will be forwarded on the child's fall teacher before school starts to give that individual an idea of that student's progress during the Elementary Summer School Program.

If you have any questions concerning the structured follow-up activities, please feel free to direct them to Joan Burnham of Applications and Compliance (458-1291) or Nancy Baenen of ORE (458-1227). They are assisting us with this aspect of the program while we and other Elementary Instructional Coordinators are off-contract until August 2.

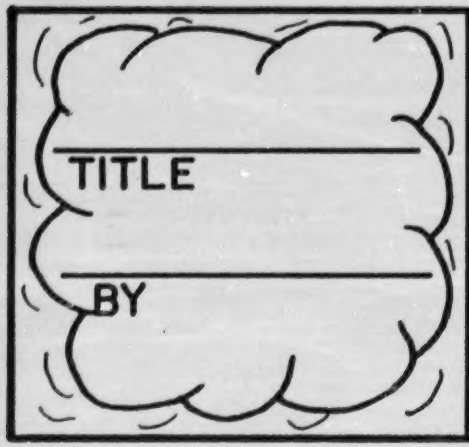
Please know how much we all appreciate your dedicated efforts this summer. We hope that you have had a good teaching experience and have a restful remaining vacation!

The Language Arts Summer School Committee

Name____________________

Show your story in comic strip form. You can write under the picture to explain the action.

82-F



E-49

82-F

Name________________

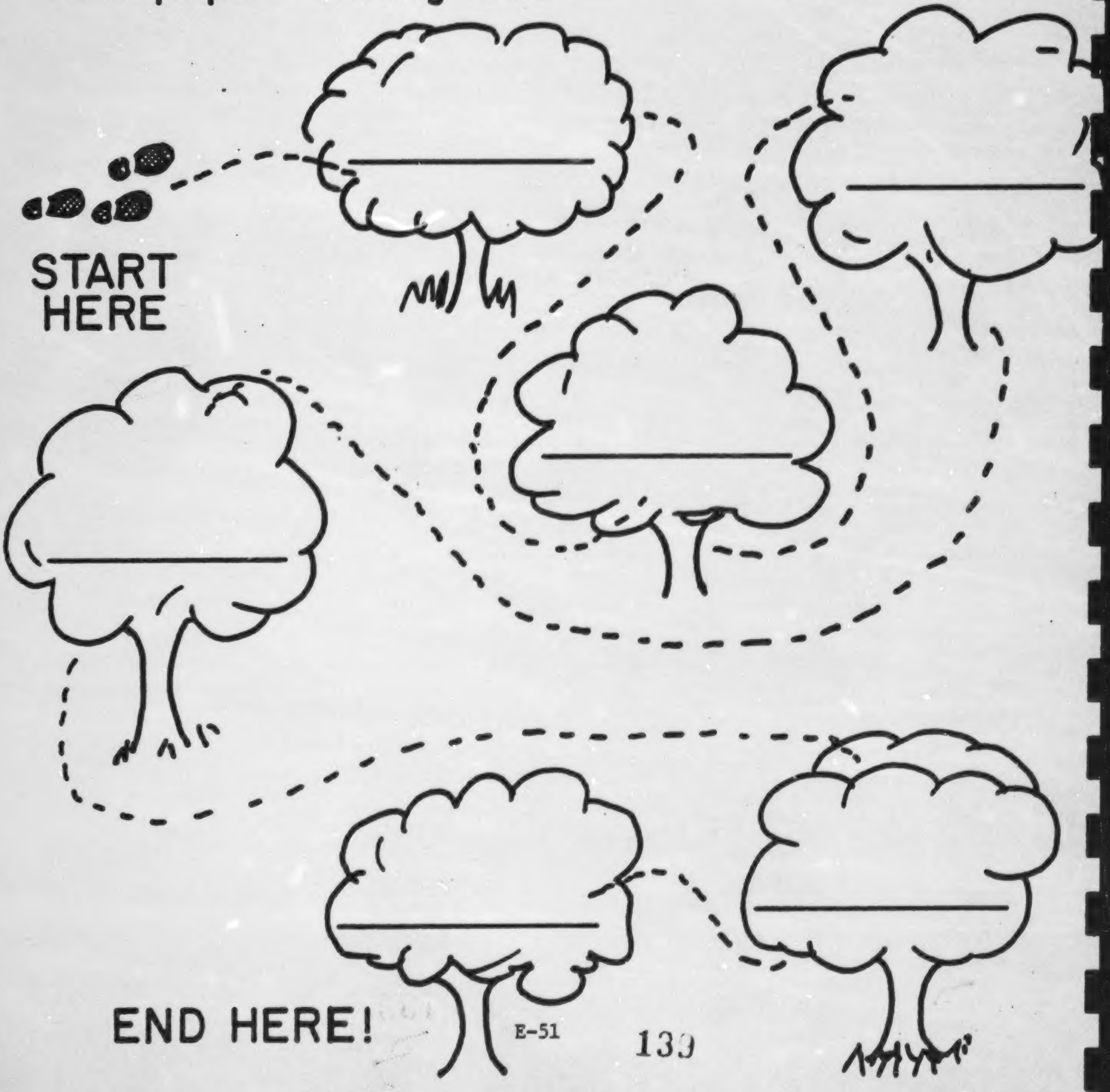
Dive into
some books
this week!

Name of Book	Author	Told Story to

Name________________

READ THROUGH THE FOREST

Make a path through the forest by listing each book on a tree that you read. You may list newspaper reading too!


START
HERE
END HERE!

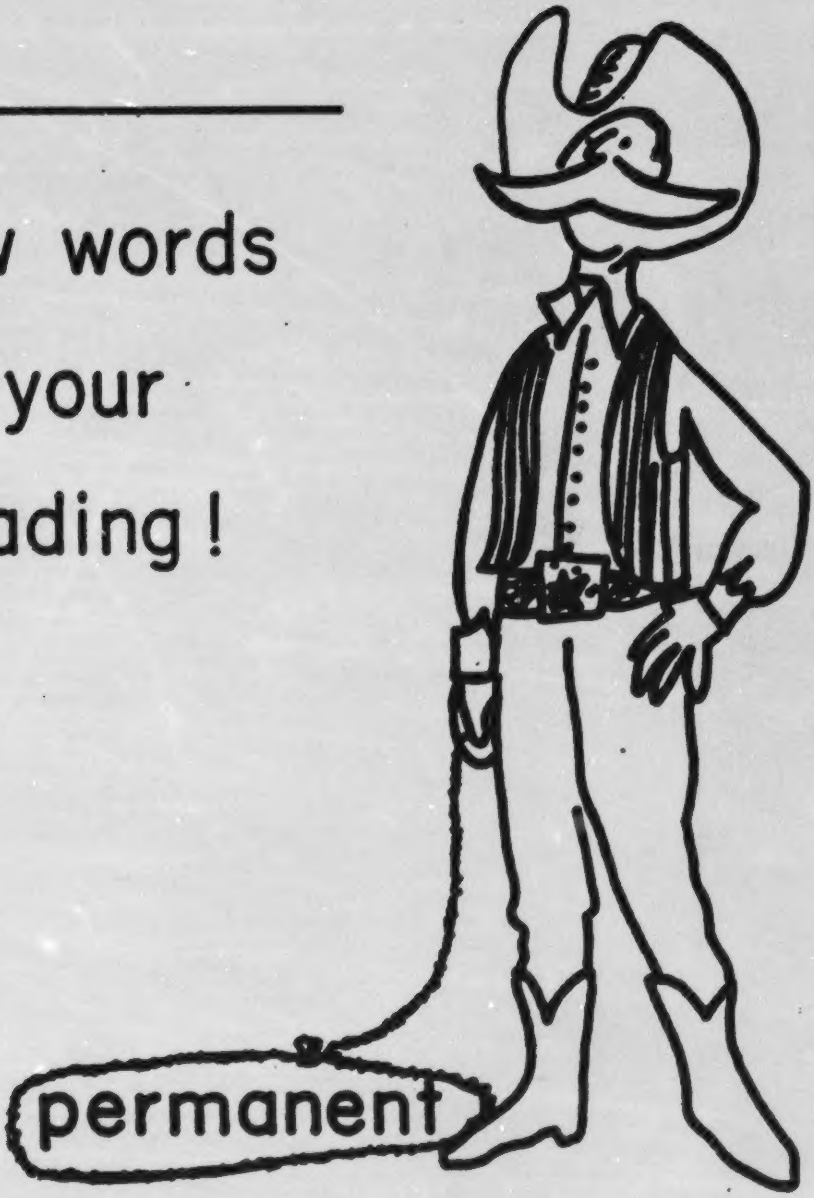
82-F

Name_______________

List new words

from your

reading!



E-52

82-F

Name________________ Choose one book:

Book:______________ Author:______________

Make a picture of something that happened in the story.

82-F

July 9, 1982

Dear Summer School Parent:

As you know, your child has had many opportunities during the summer program to take books out of the school library and to read books of interest. Since we know from research that one of the best ways for a child's reading to improve is to read more books. we urge you to encourage your child to do so.

Please take advantage of these leisurely remaining weeks of summer when your child is not in school to take him (her) to the Austin Public Library to take out more books. Summer reading can be lots of fun for your child, opening up new "worlds" of ideas and exciting experiences.

Keep in mind, too, that listening to your child read aloud for 15 minutes per day and discussing the story afterwards together is equally as valuable as the independent silent reading times. These can be some pleasurable moments for both of you, sharing some ideas and feelings together about the book.

Each week we will be sending your child some short, fun reading activities to relate to his(her) library reading. We hope that you will set aside some time for your child to complete them. They should be enjoyable, as well as help to make the summer reading more meaningful. There will be a total of 5 activities.

Your help in improving your child's reading skills is both needed and appreciated!

The Elementary Instructional
Program, AISD

MATH
CONTROL

82-F

Attachment E-7
(Page 1 of 2)

Dear Teacher,

This student was in my math class this summer. At the end of the summer session, all of my students were allowed to take home their math workbook. A letter was sent to the parents asking them to work with their child on the remaining pages in the workbook during the rest of the summer. Parents were told which pages covered topics like addition, subtraction, multiplication, division, time, money, fractions, geometry, and/or graphs (topics covered varied by grade level). General study hints were listed as well.

Please ask the student if he/she completed any additional work sheets in the notebook after summer school was over and ask to see them. Reviewing the exercises should give you some useful instructional information and make the child feel completing the work was important. Try to make the student feel good about working on math at home--especially on the summer break!

Thank you!

Summer School Teacher

MATH
EXPERIMENTAL

Dear Teacher,

This student was in my math class this summer. At the end of the summer session, all of my students were allowed to take home their math workbook. A letter was sent to the parents asking them to work with their child on the remaining pages in the workbook during the rest of the summer. Parents were told which pages covered topics like addition, subtraction, multiplication, division, time, money, fractions, geometry, and/or graphs (topics covered varied by grade level). General study hints were listed as well. A letter was sent to the parents each week for five weeks about a particular skill area. Page numbers covering a skill were listed along with instructions for each exercise. Parents were asked to concentrate on these pages during the week.

Please ask the student if he/she completed any additional work sheets in the notebook after summer school was over and ask to see them. Reviewing the exercises should give you some useful instructional information and make the child feel completing the work was important. Try to make the student feel good about working on math at home--especially on the summer break!

Thank you very much!

Summer School Teacher

82-F

Attachment E-7
(Page 2 of 2)

Dear Teacher,

This student was in my reading class this summer. After summer school was over, parents were sent independent reading exercises once a week for five weeks to work on with their child. Please ask the student to bring in any of the activities he/she completed. Reviewing the sheets will hopefully give you some useful instructional information. Try to make the student feel good about working on these activities during the summer break!

Thank you.

SUMMER SCHOOL TEACHER

82-F

AUSTIN INDEPENDENT SCHOOL DISTRICT
AUSTIN, TEXAS

Attachment E-8
(Page 1 of 2)

MEMORANDUM

TO: Hermelinda Rodriguez
DATE: August 20, 1982
FROM: John Moore II John Moore
SUBJECT: Report on Summer School

The Community Education Program provided one hour a day of recreational activities for 1,114 children enrolled in AISD remedial summer school classes. Of these, approximately 50% were Hispanic, 31% were Black, and 18% were Anglo. Community Education activities included arts, crafts, table games, physical education such as gymnastics and supervised playground activities. In addition, the community school made arrangements for having the school library available for use by the summer school students. The average staff to student ratio for these activities was 1:26. The total cost of providing these community education activities was $10,320.

Becker and Rosedale Community Schools also provided recreational activities for twelve Hispanic and 134 oriental refugee students enrolled in special summer school classes. These activities were provided from community education funds at no charge to the student.

Response from the students, summer school directors and teachers was excellant. Their comments indicate that the activities were well planned, enjoyable and had a favorable effect on the students' attitudes towards summer school.

Some suggestions for improving the program are:

1. Begin planning early with full community education involvement.
2. Allow for staggered schedules so that not all children in the school are released for snack and community education activities at the same time.
3. The student tuition should be subsidized in order to allow for a better student/teacher ratio and program supplies.
4. Regular school staff should provide assistance in providing snacks. They did at some schools but not at others.
5. Include community school campus coordinators in summer school faculty and in-service meetings.
6. Decide which schools are going to be used as soon as possible.

It has been a pleasure to work with you in assuring that the summer school experience was both beneficial and enjoyable for all concerned. I look forward to starting to work with you soon in planning next year's program!

JM/er

c.c. Campus Coordinators
Summer School Principals and Directors
Charles Aiken
Lawrence Buford

Summer School Pilot Project

Appendix F

MASTERY TESTS

Instrument Description: Mastery Tests

Brief description of the instrument:

Mastery Tests assessing student attainment of instructional objectives were included with the Math (Math for Everyone) and Reading (Chicago Mastery Learning System) curricula. Non-LEP students were assessed using these tests. LEP students in Math had their Math performance assessed through Spanish administration of the Math Mastery Tests and had their reading performance assessed by a series of criterion-referenced tests from the Spanish reading series. For math, there were approximately 50 criterion-referenced tests at each grade level. Students were tested only over the objectives that they received instruction in. In reading for non-LEP students, there were between six and eleven criterion referenced tests at each grade level. Student achievement on these mastery tests were recorded by teachers on record forms.

To whom was the instrument administered?

To students in the 1982 Summer School Pilot Project.

How many times was the instrument administered?

Mastery tests were administered once to students after each instructional unit was completed. If a student achieved mastery, that unit's mastery test was not administered again to that student. If the student failed to achieve mastery (defined as 80% accuracy on the test), then the student was administered the test a second time after receiving "corrective" instruction.

When was the instrument administered?

The initial mastery tests ("formative") were administered whenever a teacher completed the basic instruction for that unit. The final mastery tests ("summative") were administered to students failing to attain mastery on the initial test whenever a teacher completed the corrective instruction for that unit.

Where was the instrument administered?

The mastery tests were administered in the summer school classrooms.

Who administered the instrument?

Classroom teachers.

What training did the administrators have?

Classroom teachers attended three days of in-service instruction regarding the curriculum and assessment procedures and received detailed instructional manuals.

Was the instrument administered under standardized conditions?

No.

Were there problems with the instrument or the administration that might affect the validity of the data?

Tests for the first ten objectives in math at the first grade level were not available, therefore teachers administered informal assessment devices to determine students' attainment of these objectives. What procedures math teachers used for these ten objectives are unknown. No other factors affecting the validity of the tests are known.

Who developed the instrument?

The mastery tests for reading were developed by staff at the Board of Education, City of Chicago Public Schools and published by Mastery Education of Watertown, Massachusetts. The math tests were developed by Education Service Center, Region XIII staff.

What reliability and validity data are available on the instrument?

None available at present.

Are there norm data available for interpreting the results?

Students' performance is compared relative to a standard of accuracy (80% correct) on tests of each specified objective, rather than relative to the performance of other students. No group norms are available.

MASTERY TESTS

Purpose

Mastery tests were reviewed in order to gain information related to the following decision and evaluation questions:

> Decision Question D2: Was the structure of summer school appropriate for future summer schools? Are alterations necessary?
>
> > Evaluation Question D2-9: How much material were the teachers able to cover in math and reading? How long did reading units take to teach?
>
> Decision Question D4: Should retainees be encouraged to attend summer school?
>
> > Evaluation Question D4-1: Did students meet short-term objectives? How many skills were the students able to master (at an 80% level) in reading and math by the end of summer school?

Procedure

The mastery tests which were used in the 1982 Summer school were those which were included in the curriculum materials used (the Chicago Mastery Learning System for reading and Math for Everyone for math). Although Limited English Proficiency students were tested using the same mastery tests as non-LEP students in math, except with a Spanish administration instead of an English one, the procedure for non-LEP and LEP students will be described separately.

In-service training sessions were offered to teachers on May 15, May 31, June 1, and June 2, 1982. The May 15th session presented an overview of the design of the summer school program, and detailed presentations by consultants from CML Systems and from the Education Service Center, Region XIII discussing the reading and math curriculum. Included in this session were presentations regarding the mastery tests in reading and math. Another overview was presented on May 31. Teachers also received instructional manuals and materials at these sessions. Teachers met on their summer school campuses for local in-service involving an orientation to the local summer school program, the grouping of students in classes, the daily schedule, conducting home visits and phone calls to former teachers, and other aspects of the program. Five teachers (7%) were hired so late that they could not attain any of these in-service sessions. Only 14 of 23 teachers responding to an in-service teacher survey item (69%) indicated that they attended one of the curriculum overviews presented at the central in-service. However, instructions for conducting the mastery tests were explicit in the instructional manuals. Thus, conducting the mastery tests should not have been difficult for teachers even if they had not attended the in-service.

For each of their students, non-LEP teachers were instructed to record the student's progress on the record forms contained in Attachment F-1. They received these instructions during the local in-service, and the instructions were printed on the record forms. For reading, if a student achieved mastery of an objective either on the initial, or formative test, or on the second, summative test, a checkmark was placed in the row with that student's name and in the column headed by that objective. If the student did not attain mastery, the teacher was to place that student's test score in the box where the checkmark would have appeared if the objective was mastered. For math, there was a single-page list of objectives appropriate for that student's grade level. After each summative mastery test, the teacher was to write the student's percent correct on that test next to its corresponding objective. If this was 80% or greater (mastery), the teacher was to mark through the objective with a highlighter pen.

In addition to noting student mastery of a particular objective, reading teachers also noted the number of days it took for them to teach each objective. This information was recorded on the reading progress sheets, each page of which could be used to record an entire class' mastery test scores.

On July 12th, the Monday after the last week of summer school, all teachers were to give the directors all of their mastery test records. The directors then sent these records, either by school mail or by delivery in person, to ORE.

Mastery records were received from all math and from all reading teachers. These records were reviewed by ORE coders instructed to obtain the following information: for each student, the grade in which the student was enrolled for summer school, the student's reading and math teachers, which reading objectives were mastered by that student, and the average percent accuracy score on the math objectives that that student received instruction in. In addition, ORE staff recorded the math objectives taught by each of the math teachers.

The information collected by ORE coders was keypunched and summary statistics involving student mastery of reading and math objectives were computed using AISD computer facilities. The results of these analyses are reported below.

Mastery test procedures for students in LEP classes: The procedures described above were the case for students in non-LEP classes. There were three LEP classrooms at Brooke Elementary's summer school, and these classes used different materials in reading and a somewhat different procedure. For math, these students received instruction using the Math for Everyone curriculum, except that instruction was presented in Spanish. The mastery test procedure, from the teachers' in-service training to the coding of the record forms by ORE staff, was identical to the procedure for non-LEP students. LEP students received reading instruction using different materials than non-LEP students; these materials included Spanish reading instruction using Caracolitos and Una Cosa, and instruction in English as a Second Language from Stepping Into English and other supplementary materials. Criterion-referenced tests of Spanish reading were administered to these students by their teachers; these tests were provided with the curriculum. The results of these Spanish reading tests are reported below separately from the results of the non-LEP mastery tests.

Analysis Procedures. In reading, information on mastery was coded as a "1" if an objective was mastered by the student, a blank if it was not, and a "2" if the student was absent while an objective was being taught. A few teachers' records were not recorded appropriately and had to be "interpreted" by the coder.

The percent mastery was determined based on the number of students present for an objective and the number mastering it. Some classes were not able to complete all of the required units. These students were not included in determining the percent mastery since they were not presented with the material or tested on it. Required units not covered by some classes included:

Grade 1:	Unit 8 (Word Attack) Units 6, 7, 8 (Comprehension)
Grade 2:	Unit 6
Grade 3:	Unit 7
Grade 6:	Units 12, 13

For more details on material covered, see the Project Record and Teacher Records Appendices.

Limited English Proficiency (LEP) students had a different reading program, but essentially the same math program as their non-LEP peers. The analysis procedure for assessing math achievement for LEP students was identical to the procedure for non-LEP students. The reading programs of LEP and non-LEP students were different and different short-term goals had been established for both. Thus the assessment of short-term gains in reading for LEP students was performed differently than the non-LEP procedure.

There were two aspects to the LEP reading program: instruction in Spanish Reading and instruction in English as a Second Language. The short-term objective in Spanish Reading involved student performance on workbook tests, and the short-term objective in ESL was that students would complete at least two levels of the ESL series being used in the program.

The two LEP reading teachers recorded their students' workbook scores for each test completed and put a check next to a student's name if the student had completed three levels of Stepping Into English. On the Monday following the close of summer school (July 12), these records were sent to ORE. They were analyzed by generating simple descriptive statistics with a hand calculator.

In math, mastery was defined as answering 80% or more items correctly on math tests pertaining to specific skills. In the Math for Everyone series, math skills are organized in five "strands," which include three-to twenty-five skill objectives depending on the grade level. Skill mastery records were hand-coded and transferred to cards. Due to the large number of possible skills covered and the fact that skills covered varied by student, each student's average test score across all tests taken was recorded. A frequency distribution of scores for all students overall and by grade was then generated. All skills on which a student was tested were considered to be those "specified for their instructional level."

Results

Evaluation Question D2-9: How much material were the teachers able to cover in math and reading? How long did reading units take to teach?

Data pertinent to this evlauation question are described in Appendix B, Teacher Records.

Evaluation Question D4-1: Did students meet short-term objectives? How many skills were the students able to master (at an 80% level) in reading and math by the end of summer school?

The short-term objective in reading was as follows: By the end of the five-week summer school, reading skills specified for each grade level will be mastered by 90% of the retainees participating.

The number of students passing each objective, the number of students receiving instruction in that objective, and the percent of students passing are indicated in Figures F-1 through F-6 (shown at the back of this appendix).

Overall, the short-term reading objective was not met. Only 10 of the 37 required units were mastered by 90% or more of the students. These were at the fourth- and sixth-grade levels. However, at least 60% of the students mastered all of the required units they were exposed to. At least 80% of the students mastered 22 of the 37 units.

wrong

PERCENT MASTERING	1	2	3	4	5	6	TOTAL
0 - 59%	-	-	-	-	-	-	-
60 - 69%	-	4	2	-	1	-	7
70 - 79%	4	1	3	-	-	-	8
80 - 89%	5	-	-	2	5	-	12
90 -100%	-	-	-	4	-	6	10
	9	5	5	6	6	6	37

Figure F-7. NUMBER OF REQUIRED UNITS MASTERED BY VARYING PERCENTAGES OF STUDENTS BY GRADE.

The results in reading suggest that the number of students not mastering a skill unit after additional instruction and retesting was higher than expected.

The short-term objectives in reading for Limited English Proficiency (LEP) students were as follow:

> Spanish Reading: LEP retainees participating in summer school will show 80% accuracy on workbook assessments on the average.
>
> English as a Second Language: LEP retainees participating in summer school will complete at least two levels in the Stepping Into English series.

There were nine workbook tests in one class and five in the other. Scores on workbook tests were available for 38 of the 39 LEP students. All but one of the 38 students maintained a workbook test average higher than 80%. Thus, the LEP: Spanish Reading objective was met.

All 39 LEP students completed all three levels of the Stepping Into English Series. This was assessed by written teacher report.

The short-term objective for math was as follows:

> By the end of the five-week summer school, participating retainees will, on the average, master the number of skills specified for their instructional level at an 80% level.

The math objective was met. On the average, students mastered specified skills at a 90.4% level. The average percent correct for half the students exceeded 92% (median score). The frequency distribution across all grades is shown in Attachment F-1.

The mean scores for each grade level in math are as follows:

GRADE	MEAN	NUMBER OF STUDENTS WITH VALID SCORES
Kindergarten	89.4%	53
1	92.3%	252
2	91.6%	231
3	93.2%	118
4	86.5%	166
5	88.1%	163
6	90.3%	3

Figure F-8. MEAN SCORES ON MATH MASTERY TESTS. Some students who were in first-grade classes used kindergarten materials. Also, the sixth-grade materials were generally felt to be too difficult for the retainees in summer school, but a few students did use them.

As Figure F-8 shows, the average percent correct on skills tested was above 80% at all grade levels. The lowest average was 86.5% at grade 4, and the highest was 93.2% at grade 3.

	UNITS REQUIRED GRADE 1										OPTIONAL		
	Word Attack/ Study Skills					Comprehension					Word Attack		
	2: Sight Words I	4: Sight Words II	7: Sight Words III	9: Sight Words IV	8: Compound Words	5: How and Why Questions	6: Context Clues I	7: Context Clues II	8: Words That Describe		4: Titles		
Number of Students Passing Objective	209	205	200	182	175	197	183	167	142		63		
Number of Students Present When Objective was Taught	251	249	246	244	223	243	226	226	202		63		
Percent of Attending Students who Passed	83.3	82.3	81.3	74.6	78.5	81.1	81.6	73.9	70.3		1000		

Figure F-1: NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 1. Number of Students Present when Objective was Taught does not include students not exposed to the unit.

	GRADE: 2 COMPREHENSION										
	REQUIRED								OPTIONAL		
	3: IMAGERY IN READING	4: CAUSE AND EFFECT	10: INFERENCE I	12: INFERENCE II	6: CATEGORIZING				7: SENTENCE MEANING		
Number of Students Passing Objective	149	168	176	140	126				67		
Number of Students Present When Objective was Taught	249	244	245	234	200				134		
Percent of Attending Students who Passed	59.8	68.9	71.8	59.8	63.0				50.0		

Figure F-2: NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 2.

	GRADE: 3			COMPREHENSION						
	REQUIRED							OPTIONAL		
	2: SENTENCES IN SEQUENCE	4: CAUSE AND EFFECT	5: USING CONTEXT CLUES	6: CATEGORIZING	7: SENTENCE MEANING			INFERENCE I	TITLES/MAIN IDEA	
Number of Students Passing Objective	124	128	130	133	122			25	53	
Number of Students Present When Objective was Taught	182	185	184	183	166			119	147	
Percent of Attending Students who Passed	68.1	69.2	70.7	72.7	73.5			21.0	36.1	

Figure F-3: NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 3.

	GRADE: 4 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: CATEGORIZING	2: COMPARISONS I	4: COMPARISONS II	5: PICKING BEST ANSWER	8: CAUSE AND EFFECT	9: FACT AND OPINION			3: MAKING SENSE	10: FINDING THE RIGHT ANSWER	
Number of Students Passing Objective	164	165	155	144	159	156	-	-	90	80	
Number of Students Present When Objective was Taught	176	184	178	176	174	168	-	-	94	85	
Percent of Attending Students who Passed	93.2	89.7	87.1	81.8	91.4	92.9	-	-	95.7	93.0	

Figure F-4: NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 4.

	GRADE: 5 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: Content and Message (Independent Activity)	6: Sequence and Patterns	8: Topic Sentences	9: Making Inferences I	12: Problem Solving	13: Fact and Opinion			10: Globes	2: Charts	
Number of Students Passing Objective	98	90	74	95	98	98	–	–	33	34	9
Number of Students Present When Objective was Taught	115	109	114	111	110	111	–	–			
Percent of Attending Students who Passed	85.2	82.6	64.9	85.6	89.1	88.3					

Figure F-5: NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 5.

	GRADE: 6 COMPREHENSION										
	REQUIRED								OPTIONAL		
	1: CONTENT AND MESSAGE (INDEPENDENT ACTIVITY)	7: STEREOTYPES	8: TOPIC SENTENCES	11: INFERENCES II	12: PROBLEM SOLVING	13: FACT AND OPINION			10: GLOBES	4: GRAPHS	
Number of Students Passing Objective	52	51	50	54	38	39			-	-	
Number of Students Present When Objective was Taught	52	53	53	54	39	39			-	-	
Percent of Attending Students Who Passed	100%	96%	94%	100%	97%	100%			-	-	

Figure F-6. NUMBER OF STUDENTS ATTAINING REQUIRED READING OBJECTIVES FOR GRADE 6.

MMT = Mastery Math Test

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SUMMER SCHOOL 1982 -- STUDENT CHARACTERISTICS

FREQUENCY DISTRIBUTION FOR VARIABLE A17 (AVG. % CORR. ON MMT )

PERCENT               RELATIVE   ADJUSTED   CUMULATIVE
          ABSOLUTE      FREQ       FREQ        FREQ
  CODE      FREQ       (PCT.)     (PCT.)      (PCT.)

  43.00       1.         0.1        0.1         0.1
  50.00       1.         0.1        0.1         0.2
  51.00       2.         0.2        0.2         0.4
  56.00       1.         0.1        0.1         0.5
  58.00       1.         0.1        0.1         0.6
  61.00       1.         0.1        0.1         0.7
  62.00       3.         0.3        0.3         1.1
  63.00       1.         0.1        0.1         1.2
  64.00       1.         0.1        0.1         1.3
  65.00       1.         0.1        0.1         1.4
  66.00       1.         0.1        0.1         1.5
  67.00       6.         0.5        0.6         2.1
  68.00       3.         0.3        0.3         2.4
  69.00       3.         0.3        0.3         2.8
  70.00       3.         0.3        0.3         3.1
  71.00       6.         0.5        0.6         3.7
  72.00       5.         0.4        0.5         4.3
  73.00       8.         0.7        0.9         5.1
  74.00       6.         0.5        0.6         5.8
  75.00       4.         0.4        0.4         6.2
  76.00       8.         0.7        0.9         7.0
  77.00       7.         0.6        0.7         7.8
  78.00       7.         0.6        0.7         8.5
  79.00       8.         0.7        0.9         9.4
  80.00      12.         1.1        1.3        10.6
  81.00  [illegible]  [illegible]   1.0        11.6
  82.00      10.         0.9        1.1        12.7
  83.00      22.         1.9        2.3        15.0
  84.00      14.         1.2        1.5        16.5
  85.00      20.         1.8        2.1        18.6
  86.00      39.         3.4        4.2        22.8
  87.00      26.         2.3        2.8        25.6
  88.00      41.         3.6        4.4        29.9
  89.00      47.         4.1        5.0        34.9
  90.00      40.         3.5        4.3        39.2
  91.00      57.         5.0        6.1        45.3
  92.00      64.         5.6        6.8        52.1
  93.00      53.         4.6        5.6        57.7
  94.00      70.         6.1        7.5        65.2
  95.00      77.         6.7        8.2        73.4
  96.00      58.         5.1        6.2        79.6
  97.00      46.         4.0        4.9        84.5
  98.00      52.         4.6        5.5        90.0
  99.00      41.         3.6        4.4        94.4
 100.00      53.         4.6        5.6       100.0
  -0.0      202.        17.7     MISSING      100.0
  TOTAL    1141.       100.0      100.0

VALID CASES=   939
MISSING CASES=  202

MEAN=      90.3919          VARIANCE=    64.9699
STD. DEV=   8.0604          STD. ERR=     0.2630
MAXIMUM=  101.0000          MINIMUM=     43.0000
RANGE=     58.0000
```

$MEDIAN = 91.5 + \frac{1(.05)(939)-(425)}{64})$

$MED = 92.2$

Summer School Pilot Project

Appendix G

COST ANALYSIS

Instrument Description: Cost Analysis

Brief description of the instrument: Costs for planning and implementation of the summer school program are outlined. Budget printouts and purchase requisitions were used to account for costs directly paid for by the local or grant funds. Directors and coordinators who put in a great deal of time during the regular school year were surveyed to account for these additional time costs.

To whom was the instrument administered? Assistant Director - Finance, Director - Elementary School Curriculum, Director - Elementary School Management, selected elementary coordinators and planners.

How many times was the instrument administered? Once.

When was the instrument administered? September 1982.

Where was the instrument administered? In administrators' office.

Who administered the instrument? Self-administered.

What training did the administrators have? Memorandum with instructions was sent to coordinators and directors.

Was the instrument administered under standardized conditions? No.

Were there problems with the instrument or the administration that might affect the validity of the data? Time costs for planning are estimates based on recall. Some specific costs were difficult to isolate based on budget printouts. Also, some costs have not been finalized as yet.

Who developed the instrument? Office of Research and Evaluation.

What reliability and validity data are available on the instrument? None.

Are there norm data available for interpreting the results? No.

COST ANALYSIS

Purpose

A cost analysis of local and TEA grant costs of the summer school was conducted to determine overall costs, one-time start-up costs, and continuing costs. This information will be useful to Austin ISD and TEA if the program is used again in Austin or in other school districts.

Procedure

The 1982 summer school for retainees in Austin was funded through local funds and a Summer School Pilot Program grant from the Texas Education Agency. In addition to implementation costs directly budgeted for by local funds, a number of District administrators worked on planning and implementation throughout the 1981-82 school year. These time costs are also estimated here.

Budget allocations and expenditures to date were obtained from the AISD Finance office on September 15, 1982 for both local and TEA funds. Coordinators in charge of each curriculum area were interviewed and reviewed purchase requisitions to determine costs per student and class of curriculum used in the summer school. Finally, the elementary directors, coordinators, and planners who had worked during the school year on summer school planning were surveyed to determine the time commitment necessary to develop the program. The memoranda and survey sent out are shown in Attachment G-1.

Results

Costs Per Student and Class:

Reading. Each student in summer school needed the following materials:

1 Chicago Mastery Learning System kit (comprehension)	3.50

Each teacher needed:

1 Chicago Mastery Learning System teacher kit (comprehension	40.00
1 Scholastic kit (grades 1-6)	89.00
1 Modern Curriculum Press (1st grade only)	29.00
1 Houghton Mifflin (grades 2-6)	21.00
Smelly Stickers and other incentives	26.00

Limited English Proficiency Reading. A total of $1,844 was spent on summer school materials for LEP reading. Most were purchased as kits or sets used by the entire class. Prices per class were:

Caracolitos	$139.95 set (50-60 stories) $ 1.17 Teacher Guide
Una Cosa	$128.50 set (50-60 stories)
Elena y Dani	$ 4.35 each reader and workbook
Buenos Amigos	$ 5.80 each reader and workbook
Mi Escuela	$ 6.05 each reader and workbook
I Like English - Levels 1-3	$ 27.00 set

In some cases, more materials were purchased than were actually used because the number of LEP students enrolled and their level of functioning was unknown until classes started. A total of 39 students participated in LEP reading classes.

Mathematics. Each student needed:

1 level of Succeeding in Mathematics	$ 4.00
Math for Everyone duplicate materials	$ 1.00
1 calculator	$ 7.00
folder for assignments	$ .35

Each teacher received:

3 levels of Succeeding in Mathematics (above, below, and at grade level) at $4.00 each	$ 12.00
Math for Everyone	$ 20.00
Teacher resources books	$100.00

Each school received:

7 sets Base Ten Number Blocks at $61.00 each	$427.00
Money for Thermofax masters to reproduce tests and other materials, manipulatives, etc.	$900.00
1 box Thermofax masters	$ 10.00

The seven sets of Base Ten Numbers Blocks were kept in the central office on a check-out basis. One teacher at a time checked out all seven sets and each pair of students used a set. Ideally, every class would have enough block sets for each pair of children. However, the cost of the blocks was too high to do this in the Austin program in 1982. A listing of the resource books received is shown in Attachment G-2.

The $900.00 allowance for supplies was used in various ways by the schools. Reading teachers may have used some materials purchased with these funds.

Community School:

Community education activities cost approximately $10.00 per student. Families were asked to pay $10.00 tuition for this. AISD paid for any additional children (beyond one) in a family served by the program. The total number of students served was 1,114 at a total cost of $10,320. The pupil to staff ratio was 26:1.

Materials used varied by the type of class. Community education staff provided arts, crafts, table games, and physical education activities. They also staffed the libraries and helped to serve snacks to the students (along with teachers and directors at the schools).

Campus Costs:

The following were the average costs per campus for 26 days:

Clerical assistant	$ 789
Director	$ 1,520
Utilities	$ 1,934
Nurse (part-time)	$ 416
Transportation	$ 5,484
Bus monitors	$ 1,482
Snacks	$ 832
Librarian	$ 603
Total Average Cost	$13,060

AISD directors were actually on contract as administrators for all but 16 days of the summer school program. Thus, this was the additional cost to AISD for the summer program. The TEA grant covered the cost of 3 directors for 16 days ($4,560) at a daily rate of $95. If a director was hired specifically for summer school, he or she should be hired for at least 31 days to allow planning and organizational time. The AISD summer school directors spent a considerable amount of time assigning students to campuses and classes before the program began and learning about program features.

Each school also had janitorial staff not reflected in the above costs. Two nurses served the five campuses. Transportation was provided with a total of 24 buses (an average of 4.8 per campus).

Campus Space Needs:

The average pupil-to-teacher ratio was 15 to 1. Each school had about 15 teachers. Thus, a school needed 15 classrooms, the library, gym, cafeteria, main office, and outdoor areas to operate the summer school program for 225 students.

Administrative and Planning Costs:

The Directors of Elementary Management and Curriculum supervised the summer school process. They had primary responsibility for setting up the mechanical operation of the program, including enrollment, student forms, transportation, buildings, and assigning students to campuses. They also consulted with the language arts and math committees as they selected and developed curriculum, assisted in planning community school activities, helped lay out the overall organization and policies of the program at a building level, and helped with staff development. They also presented information on the program to the Cabinet and Board.

One educational planner and one evaluator developed the grant proposal in consultation with other groups involved and helped set up procedures for preservice phone calls to previous teachers, home visits to parents, and follow-up activities after summer school was over. The educational planner developed instructions and sent out the follow-up activities with the help of a secretary. Research and evaluation staff developed and duplicated some materials for home visits, teacher calls, and follow through, and provided labels for the mailings.

One District-paid evaluator and one grant-paid intern developed and carried out the evaluation in consultation with all others involved. ORE staff also provided some staff development for summer school teachers and provided information from research during the planning process.

Other administrators and secretaries in the personnel, transportation, and physical plant offices also assisted with various aspects of the program.(hiring, payroll, busing, utilities and janitorial services).

Attachment G-3 shows the approximate number of hours put in by central office directors, math coordinators, language arts coordinators, and planners on major summer school activities. The combined total number of hours put in by these administrators on planning is shown below, with hours spent on implementation shown on the next page. The time put in by these administrators was covered by their regular District salaries, and is not included in TEA or local summer school expenditures.

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS*
Planning			
Choosing Curriculum	188	124	60
Developing Curriculum	31	31	-
Setting up Procedures for Using Curriculum	228	162	66
Grant Writing	121	40	80
Overall Summer School Organization	70	12	18
Planning Transportation	4		
Assigning Students to Teachers/Schools	4		
Enrollment Forms and Procedures	13	1	
Home Visits/Phone Calls	15	10	5
Follow-up	81	25	49
Budget	25		20
Staff Development	125	11	112
Evaluation	44	6	36
Other: Developing Test Record Forms (Evaluator)	8	6	2
Developing Materials' Allocation Forms (Language Arts)	6	3	3
Allocating Materials to Schools	19	-	19
Planning Recreational Activities with Community Schools	2		
TOTAL	988	431 (42.6%)	470 (47.6%)

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS*
Implementation			
Reproducing Materials	39	15	24
Picking Up and Delivering Materials	66	4	54
Assisting Teachers	66	-	62
Answering Parent Questions	24	-	6
Assisting Directors	54	-	46
Budget	14	-	12
Follow-up Including Secretary Time	49	8	23
Other: Evaluation Activities	30	10	20
Supervising Intern (Evaluator)	25	10	15
School Visits/Observations (Director)	12	-	-
Record Keeping (Language Arts)	8	-	8
TOTAL	387	47 (12.1%)	270 (69.8%)

*Directors of Elementary Management and Curriculum did not break time into first-time and continuing-time costs.

"Initial Time Costs" reflect those costs which should be needed only once (i.e. would not have to be repeated if the program was repeated). "Continuing Time Costs" would be needed again even if the program was repeated in the same way.

These time estimates are approximate. However, they certainly point out the large amount of time spent during the 1981-82 school year and during summer 1982 on planning and implementation by AISD administrators who had this as one of a number of duties. Even without the time of two coordinators and the staff of personnel, finance, transportation, and physical plant offices who did not report, administrators reported spending 1,363 hours on planning and implementation. This translates into 170 days of full-time work. Continuing time costs totaled 740 hours or 92.5 full-time days. This represents a full-time person for March through June or a part-time person for a longer period of time. A number of central administrators felt the organization of summer school would probably improve if one person was given this as a single project for the year, or at least as a primary responsibility with release time from other duties. Since everyone involved during 1981-82 had other responsibilities, it was difficult to adequately coordinate the work of various individuals and committees.

In terms of initial and on-going time costs, 44% of the planning time was listed as initial, 48% as continuing time costs. About 8% was not specified as either. Under implementation, 12% were listed as initial time costs, 70% as continuing, and 18% were unspecified.

Allocations and Expenditures:

Budget allocations for the Summer School Pilot grant from TEA are shown in Attachment G-4. Expenditures to date are shown below for the combined local and TEA grant expenses by line item. Costs for FICA, nurses, and custodians have not yet been processed. Evaluation costs will continue through October. Some other invoices or charges could also be missing or charged to the wrong funding source. Preliminary charges are as follows:

Salaries (6111, 6113):	
Teachers	$123,845.80
Principals	$ 7,600.00
Clerical Staff	$ 3,945.50
Librarian	$ 3.016.00
Monitors	$ 7,412.07
Evaluator	$ 2,274.60
Evaluation Consultants (6213)	$ 2,510.28
Teacher Training Stipends	$ 16,584.66
General Supplies (6391)	
Instructional	$ 41,231.73
Administrative	$ 972.85
Snacks	$ 4,159.70
Testing	$ 140.75
Reproduction (6285)	$ 2,526.64
Transportation (6499)	$ 27,420.72
Electricity (6273)	$ 9,668.00
Fees	$ 10,320.00
Travel	96.83
	$263,548.91

Final Charges should be available in October and will be listed in the November report. Based on an enrollment of 1,193 students, the per pupil cost was $221.06 (excluding any outstanding charges and central administrator time).

82-F

AUSTIN INDEPENDENT SCHOOL DISTRICT
Office of Research and Evaluation

September 10, 1982

TO: Administrators Addressed

Nancy Baenen

FROM: Nancy Baenen

SUBJECT: Cost Analysis for Summer School

We are currently preparing the first report on the summer school for the Texas Education Agency (TEA). One aspect of this report is a cost-analysis, including one-time and continuing costs if the program is repeated.

We would like to count the important contribution in planning and implementation time of District administrators not paid by summer school funds. As one of these important contributors, I would appreciate it if you could fill in the attached time estimate form. Please do the following:

1) Estimate the total hours you spent on each activity (if any).

2) Estimate the portion of the total hours which were one-time initial costs (time which would not have to be repeated if the program is repeated again in the same way).

3) Estimate the portion of the total hours which are continuing costs (time which would have to be put in again even if the same program is repeated).

Feel free to add activities under "Other" if I've forgotten anything major.

Thanks a lot!

NB:rrf
Attachment

Administrators addressed:

Hermelinda Rodriguez
Timy Baranoff
Joan Burnham
Anita Uphaus
Nancy Duncan
Connie Cripps
Roberta Green
Teresita Rodriguez
Anita Coy
Alicia Martinez
Paola Zinnecker
Lucy Sahraie
Eleanor Dugger
Lavonne Rogers
Anna Salinas
Kathryn Stone
Elma Berrones

Approved: Freda M Holley
Director, Office of Research and Evaluation

SUMMER SCHOOL
TIME ESTIMATE

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS
PLANNING			
Choosing Curriculum			
Developing Curriculum Materials			
Setting Up Procedures for Using Curriculum			
Grant Writing			
Overall Summer School Organization			
Planning Transportation			
Assigning Students to Schools/Teachers			
Enrollment Forms and Procedures			
Home Visits/Phone Calls			
Followup Planning			
Budget			
Staff Development			
Evaluation			
Other			
IMPLEMENTATION			
Reproduction of Materials			
Pickup and Delivery of Materials			
Assistance to Teachers			
Answering Parent Questions			
Assisting Directors			
Budget			
Followup (Count Secretary Time)			
Other			

*Time costs which should be necessary only once. That is, if the same program is done again, this time would not be needed.

PLEASE RETURN BY SEPTEMBER 17 TO: NANCY BAENEN
ORE, BOX 79, ADM. BLDG.

Attachment G-2

82-F

Suggested Materials for
Math for Everyone.

Cuisenaire Co. of America, Inc.
12 Church Street, Box D
New Rochelle, NY 10805

Dr. Jim's Elementary Math Prescriptions (Gr. 1-6)

35010 $12.95

Addison Wesley Pub. Co.
2725 Sand Hill Rd. Room a204
Menlo Park, CA 94025

Mathematics Their Way

04320 $20.64

Creative Publications
P.O. Box 10328
Palo Alto, CA 94303

The Mathworks, Handbook of Activities for Helping Students Learn Mathematics (K-8)

10770 $19.95

Good Time Math Event Book (Gr.4-6

10075 $8.95

Enrichment:

Keystrokes

Calculator Capers

SUMMER SCHOOL
TIME ESTIMATE

Directors - Elementary
Curriculum & Management

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS
PLANNING			
Choosing Curriculum	4	Directors did not break it down.	
Developing Curriculum Materials			
Setting Up Procedures for Using Curriculum			
Grant Writing	1		
Overall Summer School Organization	40		
Planning Transportation	4		
Assigning Students to Schools/Teachers	4		
Enrollment Forms and Procedures	12		
Home Visits/Phone Calls			
Followup Planning	7		
Budget	5		
Staff Development	2		
Evaluation	2		
Other : Planning Recreational Activities with Community Schools	2		
Form Development	3		
TOTAL	86		
IMPLEMENTATION			
Reproduction of Materials			
Pickup and Delivery of Materials			
Assistance to Teachers			
Answering Parent Questions	18		
Assisting Directors	8		
Budget	2		
Followup (Count Secretary Time)	18		
Other: School Visits/Observation	12		
TOTAL	58		

*Time costs which should be necessary only once. That is, if the same program is done again, this time would not be needed.

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SUMMER SCHOOL
TIME ESTIMATE

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS
PLANNING			
Choosing Curriculum	85	50	35
Developing Curriculum Materials	-		
Setting Up Procedures for Using Curriculum	50	15	35
Grant Writing	-		
Overall Summer School Organization	20	10	10
Planning Transportation			
Assigning Students to Schools/Teachers			
Enrollment Forms and Procedures			
Home Visits/Phone Calls			
Followup Planning	20	10	10
Budget	10	0	10
Staff Development	65	5	60
Evaluation	19	0	19
Other			
TOTAL	269	90	179
IMPLEMENTATION			
Reproduction of Materials	30	15	15
Pickup and Delivery of Materials	20	0	20
Assistance to Teachers	20	0	20
Answering Parent Questions	5	0	5
Assisting Directors	10	0	10
Budget	5	0	5
Followup (Count Secretary Time)	15	0	15
Other			
TOTAL	105	15	90

*Time costs which should be necessary only once. That is, if the same program is done again, this time would not be needed.

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Attachment G-3
(Continued, Page 3 of 4)

SUMMER SCHOOL
TIME ESTIMATE

Language Arts Coordinators**

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS
PLANNING			
Choosing Curriculum	99	74	25
Developing Curriculum Materials	31	31	0
Setting Up Procedures for Using Curriculum	174	145	29
Grant Writing	-	-	-
Overall Summer School Organization	6	-	6
Planning Transportation	-	-	-
Assigning Students to Schools/Teachers	-	-	-
Enrollment Forms and Procedures	-	-	-
Home Visits/Phone Calls	-	-	-
Followup Planning	4	0	4
Budget	10	-	10
Staff Development	46	-	46
Evaluation	5	-	5
Other: Developing Materials' Allocation Forms Allocat	6	3	3
Allocating Materials to Schools	19	-	19
TOTAL	400	253	147
IMPLEMENTATION			
Reproduction of Materials	7	-	7
Pickup and Delivery of Materials	32	-	32
Assistance to Teachers	43	-	39
Answering Parent Questions	-	-	-
Assisting Directors	33	-	33
Budget	4	-	4
Followup (Count Secretary Time)	2	-	2
Other: Record-keeping Orders from 4 Companies	8	0	8
TOTAL	129	0	125

*Time costs which should be necessary only once. That is, if the same program is done again, this time would not be needed.

**Based on responses of 5 of 7 coordinators. About 10% of the committee's time was spent on LEP program plus 46 hours for 3 coordinators.

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SUMMER SCHOOL
TIME ESTIMATE

Evaluator/Planner

ACTIVITY	TOTAL HOURS SPENT	INITIAL TIME COSTS*	CONTINUING TIME COSTS
PLANNING			
Choosing Curriculum	-	-	-
Developing Curriculum Materials	-	-	-
Setting Up Procedures for Using Curriculum	4	2	2
Grant Writing	120	40	80
Overall Summer School Organization	4	2	2
Planning Transportation			
Assigning Students to Schools/Teachers			
Enrollment Forms and Procedures	1	1	-
Home Visits/Phone Calls	15	10	5
Followup Planning	50	15	35
Budget	18	-	18
Staff Development	12	6	6
Evaluation	18	6	12
Other: Developing Test Record Forms	8	6	2
TOTAL	250	88	162
IMPLEMENTATION			
Reproduction of Materials	2		2
Pickup and Delivery of Materials	14	4	10
Assistance to Teachers	3	-	3
Answering Parent Questions	1	-	1
Assisting Directors	3	-	3
Budget	3	-	3
Followup (Count Secretary Time)	14	8	6
Other: Evaluation Activities	30	10	20
Supervising Intern	25	10	15
TOTAL	95	32	63

*Time costs which should be necessary only once. That is, if the same program is done again, this time would not be needed.

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SUPERINTENDENT OF SCHOOLS

Dr. John Ellis

DIRECTOR, OFFICE OF RESEARCH AND EVALUATION

Dr. Freda M. Holley